DEVELOPMENT SERVICES DEPARTMENT
ENVIRONMENTAL COORDINATOR
450 110th Ave NE
BELLEVUE, WA 98009-9012

DETERMINATION OF NON-SIGNIFICANCE

PROPONENT: Dave Buck, Chesmore Buck Architecture

LOCATION OF PROPOSAL: 9312 SE Shoreland Dr.

DESCRIPTION OF PROPOSAL: Construction of a detached cabana structure, pool and associated improvements in a steep slope critical area that are not necessary to the construction of the proposed and exempt single-family residence.

FILE NUMBERS: 18-131846-LO **PLANNER:** Reilly Pittman

The Environmental Coordinator of the City of Bellevue has determined that this proposal does not have a probable significant adverse impact upon the environment. An Environmental Impact Statement (EIS) is not required under RCW 43.21C.030(2)(C). This decision was made after the Bellevue Environmental Coordinator reviewed the completed environmental checklist and information filed with the Land Use Division of the Development Services Department. This information is available to the public on request.

☐ There is no comment period for this DNS. There is a 14-day appeal period. Only persons who submitted written comments before the DNS was issued may appeal the decision. A written appeal must be filed in the City Clerk's office by 5:00 p.m. on _____.

☒ This DNS is issued after using the optional DNS process in WAC 197-11-355. There is no further comment period on the DNS. There is a 14-day appeal period. Only persons who submitted written comments before the DNS was issued may appeal the decision. A written appeal must be filed in the City Clerk's Office by 5 p.m. on **11/21/2019**

☐ This DNS is issued under WAC 197-11-340(2) and is subject to a 14-day comment period from the date below. Comments must be submitted by 5 p.m. on _____. This DNS is also subject to appeal. A written appeal must be filed in the City Clerk's Office by 5:00 p.m. on _____.

This DNS may be withdrawn at any time if the proposal is modified so as to have significant adverse environmental impacts; if there is significant new information indicating a proposals probable significant adverse environmental impacts (unless a non-exempt license has been issued if the proposal is a private project): or if the DNS was procured by misrepresentation or lack of material disclosure.

Elizabeth M. Stead _____ **11/7/2019**

Environmental Coordinator
Elizabeth Stead

Date

OTHERS TO RECEIVE THIS DOCUMENT:

☒ State Department of Fish and Wildlife / Stewart.Reinbold@dfw.gov
☒ State Department of Ecology, Shoreline Planner N.W. Region / Jobu461@ecy.wa.gov; sepaunit@ecy.wa.gov
☒ Army Corps of Engineers
☒ Attorney General ecyolyef@atg.wa.gov
☒ Muckleshoot Indian Tribe Karen.Walter@muckleshoot.nsn.us; Fisheries.fileroom@muckleshoot.nsn.us

City of Bellevue
Development Services Department
Land Use Staff Report

Proposal Name:	Sadis Residence
Proposal Address:	9312 SE Shoreland Dr.
Proposal Description:	Critical Areas Land Use Permit to demolish an existing single-family residence and existing improvements and construct a new residence, driveway, detached cabana structure, pool, patio, walkways, and other improvements on a property adjacent to Lake Washington. Modification and/or disturbance of a steep slope critical area, 50-foot top-of-slope buffer, and 75-foot toe-of-slope structure setback is proposed.
File Number:	18-131846-LO
Applicant:	Dave Buck, Chesmore Buck Architecture
Decisions Included:	Critical Areas Land Use Permit (Process II. 20.30P)
Planner:	Reilly Pittman, Land Use Planner
State Environmental Policy Act Threshold Determination:	**Determination of Non-Significance** Elizabeth Stead, Environmental Coordinator Development Services Department
Director's Decision:	**Approval with Conditions** Michael A. Brennan, Director Development Services Department By: _____ Elizabeth Stead, Land Use Director

Application Date:	December 6, 2018
Notice of Application Date:	January 17, 2019 and Re-Notice on February 28, 2019
Decision Publication Date:	November 7, 2019
Appeal Deadline:	November 21, 2019

For information on how to appeal a project proposal, visit the Permit Center at City Hall or call 425-452-6800. Comments on State Environmental Policy Act (SEPA) Determinations can be made with or without appealing the proposal within the noted comment period for a SEPA Determination. Appeals must be made to the City of Bellevue City Clerk's Office by 5 p.m. on the date noted above for the appeal deadline.

CONTENTS

Documents Referenced in Report from Project File

1. Critical Areas Report Plans – Enclosed
2. Project Plans (Site Plan, Civil Plan, Survey) – In File
3. Critical Areas Report – In File
4. Geotechnical Report – In File
5. Tree Inventory Report – In File
6. Public Comments – In File
7. Permit forms and documents – In File

I. Proposal Description

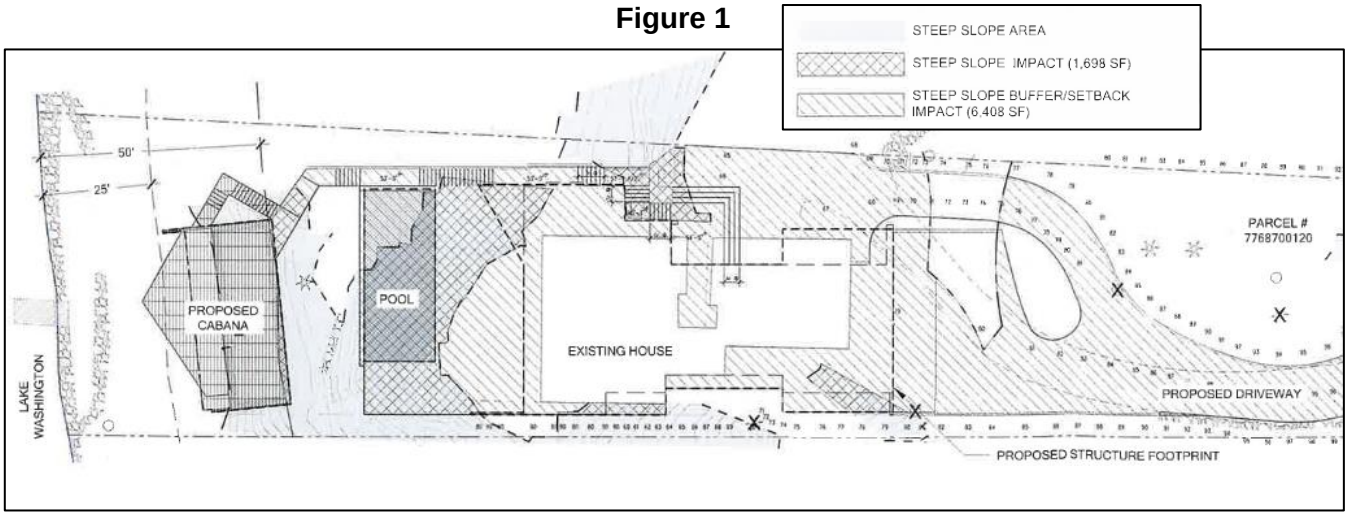
The applicant proposes to demolish the existing residence and construct a new residence, driveway, detached cabana structure, pool, patios, decks, and other improvements that will impact:

- 1,698 square feet of steep slope critical area plus approximately 668 square feet of steep slope critical area that is within the 50-foot setback from Lake Washington.
- Approximately 3,378 square feet of impact to the 50-foot top-of-slope buffer
- Approximately 3,030 square feet of impact to the 75-foot toe-of-slope structure setback, which is largely related to replacement of the existing driveway in the same footprint.

The proposed total impact of 2,366 square feet of steep slope and 6,475 square feet of combined slope buffer and slope structure setback is proposed to be mitigated by planting 3,257 square feet of vegetation in the steep slopes, buffer, and setback that remain on the site.

LUC 20.25H.015 allows for disturbance or modification of a critical area through a critical areas report as part of a Critical Areas Land Use Permit. The critical areas report is intended to provide flexibility for sites where the expected critical areas functions and values are not present or severely limited due to degraded conditions. The existing site is degraded in function and value and lacks the vegetative structural diversity found in higher-quality sites with forested steep slopes near Lake Washington. Therefore, the steep slope, buffer and structure setback are not fully performing their respective ecological functions. The submitted critical areas report documents that the ecological conditions of the existing steep slopes on the site are degraded and that the proposed mitigation will increase the ecological functions and values beyond the existing condition. Approval of a Critical Areas Land Use Permit is required for the proposed impacts and any temporary disturbance that will be restored. See reference document 1 for critical areas report plans and figure 1 for a depiction of the project.

Figure 1



II. Site Description, Zoning, and Land Use

A. Site Description

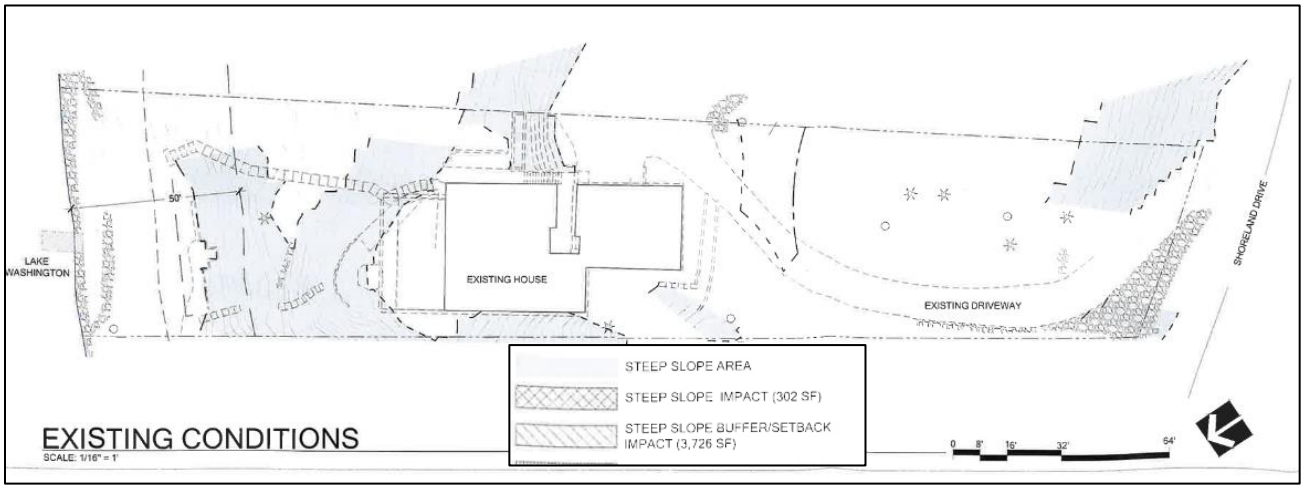
The project site is located at 9312 SE Shoreland Drive in the Southwest Bellevue Subarea. The site is adjacent to Meydenbauer Bay on Lake Washington and is surrounded by other residential properties to the west and east. The property obtains access from SE Shoreland Drive (a public road) along the southern property boundary. A long driveway traverses the slope down to the house; to aid access there is an easement for the benefit of the subject site that extends onto the adjacent property to the east. There is an existing single-family residence on-site which is proposed for demolition. The existing house is located along the eastern property line in approximately the middle of the property. The site generally slopes down from the public road to the lake with an approximately elevation of 90 feet from the road to the lake. Steep slope critical areas are found intermittently on the site but primarily along the road and below the existing house. The slope below the house slopes down to a flat area along the shoreline. Vegetation on the site is mostly ornamental and non-native. The site has a total of ten significant trees found in figure 2 below from the submitted tree inventory and arborist report found as reference document 5.

Figure 2

Significant Tree #	Species	Anticipated Action	Total Diameter Inches	Diameter Inches to be Retained
1630	Bitter cherry	Retain / protect	22.2	22.2
1631	Shore pine	Retain / protect	9.5	9.5
1633	English holly	Remove	11.9	N/A
1634	European mountain-ash	Remove	15.1	N/A
1635	Western red cedar	Remove	8.9	N/A
1636	Western red cedar	Retain / protect	37.7	37.7
1637	Western red cedar	Retain / protect	23.1	23.1
1638	Kousa dogwood	Retain / protect	8.1	8.1
1639	Western hemlock	Remove	32.5	N/A
1640	Oriental spruce	Retain / protect	14.0	14.0
		Total Diameter Inches	**183.0**	**114.6 (62%)**

Most trees are native or ornamental varieties, but the holly and mountain ash are listed as a weed of concern in King County. The understory is sparsely vegetated with some native species but mostly consisting of lawn and invasive species. See Figure 3 below for existing site condition.

Figure 3



B. Zoning

The property is zoned R-4, single-family residential, and the proposed house and improvements are allowed in this zoning district.

C. Land Use Context

The property has a Comprehensive plan Land Use Designation of SF-H (Single Family High Density). Construction of a home and improvements is consistent with this land use.

D. Critical Areas On-Site and Regulations

i. Geologic Hazard Areas

Geologic hazards pose a threat to the health and safety of citizens when commercial, residential, or industrial development is inappropriately sited in areas of significant hazard. Some geologic hazards can be reduced or mitigated by engineering, design, or modified construction practices. When technology cannot reduce risks to acceptable levels, building in geologically hazardous areas is best avoided (WAC 365-190).

Steep slopes may serve several other functions and possess other values for the City and its residents. Several of Bellevue's remaining large blocks of forest are located in steep slope areas, providing habitat for a variety of wildlife species and important linkages between habitat areas in the City. These steep slope areas also act as conduits for groundwater, which drains from hillsides to provides a water source for the City's wetlands and stream systems. Vegetated steep slopes also provide a visual amenity in the City, providing a "green" backdrop for urbanized areas enhancing property values and buffering urban development.

III. Consistency with Land Use Code Requirements:

A. Zoning District Dimensional Requirements:

The R-4 zoning dimensional requirements found in LUC 20.20.010 are generally met by the proposed house, but conformance will be verified during building permit review. All setbacks, height, lot coverage by structure, and impervious surface may be required to be verified by survey through the building permit inspection process. **See Conditions of Approval in Section X of this report.**

B. Impervious Surface Coverage

The site is zoned R-4 and the project proposes the limited use of infiltrative pervious pavements at flat locations on the site per the allowance for hard surface in LUC 20.20.010 and LUC 20.20.425. As a result, there is a maximum impervious surface coverage for this project of 45 percent of the gross lot area and a maximum total hard surface coverage of 75 percent. As stated above, the plans submitted under the building permit shall verify conformance to these limits on impervious surface and hard surface.

C. Guest Cottage

The proposed detached structure includes kitchen facilities, living space, and a bathroom which qualifies as a dwelling unit. Detached dwelling units are only allowed by the Land Use Code as a guest cottage on lots that have at least 13,500 square feet of lot area per LUC 20.20.250. The subject site is 21,610 square feet in area and qualifies for a guest cottage. A guest cottage agreement that prevents this unit from being rented is required to be recorded prior to issuance of the building permit for the structure. **See Conditions of**

Approval in Section X of this report.

D. Noise Code Requirements BCC 9.18

All noise generated, including construction noise, is regulated by BCC 9.18. Noise related to construction is exempt from the provisions of BCC 9.18 between the hours of 7 am to 6 pm Monday through Friday and 9 am to 6 pm on Saturdays, except for Federal holidays and as further defined by the Bellevue City Code. Noise emanating from construction is prohibited on Sundays or legal holidays unless expanded hours of operation are specifically authorized in advance. Requests for construction hour extension must be done in advance with submittal of a construction noise expanded exempt hours permit.

E. Critical Areas Overlay District LUC 20.25H

The City of Bellevue Land Use Code Critical Areas Overlay District (LUC 20.25H) establishes performance standards and procedures that apply to development on any site which contains in whole or in part any portion designated as critical area, critical area buffer or structure setback from a critical area or buffer. The project area is within a steep slope critical area, 50-foot top-of-slope buffer, the 75-foot toe-of-slope setback, and is subject to the performance standards found below:

i. Consistency with LUC 20.25H.125

Development within a landslide hazard or steep slope critical area or the critical area buffers of such hazards shall incorporate the following additional performance standards in design of the development, as applicable. The requirement for long-term slope stability shall exclude designs that require regular and periodic maintenance to maintain their level of function.

1. **Structures and improvements shall minimize alterations to the natural contour of the slope, and foundations shall be tiered where possible to conform to existing topography;**

   The proposed home is generally sited within the existing house footprint and the location of existing improvements as much as possible which minimizes disturbance of the site. The proposed cabana structure and pool are located in the steep slope below the house. These structures are proposed to be built using solider pile walls that will maintain the existing topography. The pool patio will be a concrete deck that spans over the slope and does not require fill material to be placed on the slope. These methods will preserve existing topography and minimize changes to the slope outside of the structural improvement footprints.

2. **Structures and improvements shall be located to preserve the most critical portion of the site and its natural landforms and vegetation;**

   The proposed development is primarily a result of the proposed house utilizing the existing house footprint disturbance. Given the steepness of the driveway and the need for access as well as the desire to preserve the larger trees on the site located

near the driveway, the proposal locates the cabana and pool on the slopes between the house and Lake Washington. The proposal will result in the removal of four trees, two of which were determined to be in poor health, and the other two are listed as noxious species of concern by King County. The slope impacted by the cabana and pool mostly lacks tree coverage except for a 22-inch diameter shore pine which is retained between the cabana and pool. The slope is largely covered by ornamental vegetation and modified by walkways and walls that cross the slope. The geotechnical report notes that this slope was created through prior grading activity but meets the qualifications to be considered a steep slope. As a result, the ecological impact from locating the cabana and pool is less in this location that elsewhere on the site. As previously stated, the cabana and pool utilize soldier pile wall shoring and decked patio to preserve the existing topography and thereby minimizes impacts to critical area functions as compared to other construction methods that use fill or involve regrading.

3. **The proposed development shall not result in greater risk or a need for increased buffers on neighboring properties;**
   Per the submitted geotechnical report prepared by PanGeo dated May 10, 2019 which is reference document 4, the slope stability analysis shows that "the factors of safety after the development are greater than the existing site condition (Geotech report, Pg. 18). This means that the slopes will not have greater risk following development and that the "proposed development will not have adverse [*sic*] impacts to the subject and neighboring properties" (Pg. 18). The applicant will be required to record a hold harmless agreement which releases the City from liability for any damage arising from the location of improvements within a geologically hazardous area in accordance with LUC 20.30P.170. All work is required to be carried out per the recommendations of the geotechnical engineer. **See Conditions of Approval related to the hold harmless agreement and geotechnical recommendations in Section X of this report.**

4. **The use of retaining walls that allow the maintenance of existing natural slope area is preferred over graded artificial slopes where graded slopes would result in increased disturbance as compared to use of retaining wall;**
   The proposal utilizes soldier pile walls and retaining walls to maintain existing topography.

5. **Development shall be designed to minimize impervious surfaces within the critical area and critical area buffer;**
   Location of improvements in the steep slope is minimized by the project to the maximum extent possible by locating improvements in the same or similar locations that they currently exist. The house and driveway are largely in the same location as they currently are located. The proposed pool and cabana are partially located on a steep slope which is manmade and lacks significant vegetation due

to prior disturbance. The proposal also includes limited use of pervious concrete in flat areas that will allow water infiltration supported by engineering analysis.

6. **Where change in grade outside the building footprint is necessary, the site retention system should be stepped and regrading should be designed to minimize topographic modification. On slopes in excess of 40 percent, grading for yard area may be disallowed where inconsistent with this criteria;**
Most of the proposed improvements under this proposal are outside of the building footprint which means the grade beyond the footprint will be modified. Changes to the existing grades outside of the building footprint are minimized through the use of soldier pile walls and retaining walls that allow the existing slopes to be kept in place above and below the proposed improvements. The walls step the topography to minimize grading. No yards are proposed in steep slope areas. In the case of the proposed pool and patio, the solider pile walls create a structure that maintains the existing steep slope below the pool and patio as the walls allow these improvements to be suspended above the slope and held by the walls.

7. **Building foundation walls shall be utilized as retaining walls rather than rockeries or retaining structures built separately and away from the building wherever feasible. Freestanding retaining devices are only permitted when they cannot be designed as structural elements of the building foundation;**
The foundation walls of the cabana, pool, and house are utilized for retention. There are no freestanding retaining walls that alter a slope. All walls are associated with structures or provide access.

8. **On slopes in excess of 40 percent, use of pole-type construction which conforms to the existing topography is required where feasible. If pole-type construction is not technically feasible, the structure must be tiered to conform to the existing topography and to minimize topographic modification;**
The proposal utilizes solider pile walls to provide permanent shoring and patio decks to span over the slope to construct the pool and limit alteration of the existing topography. Construction of the house is within the existing footprint that has already been graded and use of pole type construction is not applicable. The cabana is located at the toe-of-the slope and uses the soldier pile to support the foundation of the structure. The piles of the solider pile wall are in essence providing pole construction on the slope as it supports the pool and concrete deck above.

9. **On slopes in excess of 40 percent, piled deck support structures are required where technically feasible for parking or garages over fill-based construction types; and**
No construction of parking is proposed in steep slopes. The parking area is located

adjacent to the house where it currently is located.

10. **Areas of new permanent disturbance and all areas of temporary disturbance shall be mitigated and/or restored pursuant to a mitigation and restoration plan meeting the requirements of LUC 20.25H.210.**
    The proposal includes a mitigation planting plan that will install 3,257 square feet of native vegetation per the mitigation plan found as reference document 1. The planting plan includes the installation of 10 native conifer trees on the site in addition to deciduous tree planting to replace trees removed. **See Section X for a condition of approval related to the mitigation planting plan.**

ii. Consistency with LUC 20.25H.145

Modifications to geological hazard areas and critical area buffers shall only be approved if the Director determines that the modification:

1. **Will not increase the threat of the geological hazard to adjacent properties over conditions that would exist if the provisions of this part were not modified;**
2. **Will not adversely impact other critical areas;**
3. **Is designed so that the hazard to the project is eliminated or mitigated to a level equal to or less than would exist if the provisions of this part were not modified;**
4. **Is certified as safe as designed and under anticipated conditions by a qualified engineer or geologist, licensed in the state of Washington;**
5. **The applicant provides a geotechnical report prepared by a qualified professional demonstrating that modification of the critical area or critical area buffer will have no adverse impacts on stability of any adjacent slopes, and will not impact stability of any existing structures. Geotechnical reporting standards shall comply with requirements developed by the Director in City of Bellevue Submittal Requirements Sheet 25, Geotechnical Report and Stability Analysis Requirements, now or as hereafter amended;**
6. **Any modification complies with recommendations of the geotechnical support with respect to best management practices, construction techniques or other recommendations; and**
7. **The proposed modification to the critical area or critical area buffer with any associated mitigation does not significantly impact habitat associated with species of local importance, or such habitat that could reasonably be expected to exist during the anticipated life of the development proposal if the area were regulated under this part.**

The applicant provided a Critical Areas Report prepared by The Watershed Company and the analysis of a qualified geotechnical engineer in a geotechnical report dated May 20, 2019 prepared by PanGeo. The geotechnical engineer found

that the proposed improvements will not increase the threat of the geological hazard to adjacent properties, impact other critical areas including habitat associated with species of local importance and is designed to mitigate any hazard to a level greater than the existing condition of the site. The project will be constructed per the recommendations of the geotechnical engineer. **See Conditions of Approval in Section X of this report**

IV. Public Notice and Comment

Application Date:	December 6, 2018
Public Notice (500 feet):	January 17, 2019 and February 28, 2019
Minimum Comment Period:	14-days from each notice

The Notice of Application for this project was published in the City of Bellevue weekly permit bulletin on January 17, 2019 and was re-noticed on February 28, 2019 to include SEPA review. It was mailed to property owners within 500 feet of the project site. A few neighbors to the property submitted comments regarding the project. Comments were also received from the Department of Ecology and the Muckleshoot Tribe. The comments received are summarized below and responses are provided. Submitted public comments can be found in the project file and are reference document number 6.

A. Comments from Department of Ecology

Summary: Clarification if the project is exempt from a shoreline substantial development permit and if a shoreline variance is required. Demonstrate compliance with the SMP. The critical areas ordinance is separate from the SMP and are incorporated by reference.

Response: Staff required the applicant to submit a shoreline exemption application. No structure is proposed within the 25-foot setback from the shoreline; a patio is proposed in the 25-foot setback which is not a structure that reduces the shoreline setback or requires a shoreline variance. The applicant is applying for a critical areas land use permit due to impacts to the steep slopes, slope buffer, and structure setback on the site which is required per LUC 20.25H. Per LUC 20.25E, the critical areas code is incorporated by reference but does not remove the need for a critical areas land use permit.

B. Comments from Muckleshoot Tribe

Summary: Sockeye and steelhead should be included as species of local importance discussed in the submitted critical areas report and their nearest beach spawning areas in order to determine impacts from the proposed project. There are limited details regarding how stormwater will be managed from this site to determine if the project will impact juvenile salmon in the nearshore. There is no information about the pool and how potential discharges of chlorinated water to the lake will be addressed. The shoreline mitigation needs to include removal of the upland secondary bulkhead and additional planting is needed. Removal of Japanese knotweed is needed.

Response: Many of these comments are beyond the scope of the applicable City codes for critical areas and shorelines. The critical areas report requires an applicant to determine if species of local importance listed in the code are present on the site. This list does not include sockeye or steelhead salmon currently. However, there are also no elements of this project that are within the lake or make changes to the dock or bulkhead. There is no code requirement to access impacts to off-site spawning grounds when none of the proposed work is in the water. The existing site discharges to Lake Washington which the proposed site will maintain due to the steep topography. Some pervious pavement will be used to infiltrate stormwater at flat locations. The stormwater plan proposed conforms to the requirements of the City's stormwater codes and has approval from the Utility Department. The proposed pool will connect to the City's sewer system which would receive any discharges from the pool. Shoreline planting and mitigation is directed by LUC 20.25E which assigns an existing value to the shoreline vegetation that must be maintained or made better by a proposal. The requirement for additional mitigation through planting or removal of existing improvements and invasive vegetation is beyond the requirements of the shoreline code. As the proposed work in the shoreline is within the allowances and intent of the shoreline code there is no additional mitigation required.

C. Comments from Geoffrey Holm

Summary: The proposal should not be approved. It proposes 72 impervious coverage which exceeds the maximum 45 percent allowed. The property sits on an earthquake fault line and planting alone will not make a swimming pool safe. The new residence is taller and larger than the existing residence and includes a pool on the steep slope which is too heavy for the steep slope. The cabana is located in the 50-foot shoreline setback which is not allowed and is too large which requires a shoreline variance. A shoreline substantial development permit is required as a cabana and a pool are not listed appurtenances in WAC 173-27-040 and the amount of combined earthwork to build the cabana and pool exceeds 250 cubic yards. The project requires SEPA review. The project does not comply with the critical areas code and fails to avoid impacts to the steep slope, buffer, and setback but not exploring alternatives to impacts proposed. Landslide hazards are not properly documented or delineated. Mitigation is inadequate. Construction easements to work on our property will not be granted.

Response: The proposed impervious surface coverage was reduced to comply with LUC 20.20.010 and allowances for hardscape and pervious pavement. The City approves swimming pools and other development across the City which is within an earthquake prone area. There is no code that prohibits development based on the risk of an earthquake. The applicant has provided analysis from a geotechnical engineer that shows construction of the cabana and pool on the slope, utilizing the proposed soldier piles walls will increase slope stability. The project is exempt from a shoreline substantial development permit and the applicant applied for a shoreline exemption. The cabana and pool are appurtenances as all eligible appurtenances do not need to be listed in the code

or WAC. The proposed cabana and pool are also not exceeding the 250 cubic yard limit. The project was renoticed to include SEPA review for the impacts to steep slope critical areas from the proposed cabana and pool. As documented in this staff report, the project complies with the critical areas code which allows degraded sites to be impacted in exchange for an improvement in the overall ecological function and value of the site, which is achieved by the proposed mitigation. The project avoids impacts to the most significant vegetation on the site which is found upslope of the house and near the driveway. The proposal largely keeps disturbance of the site and critical areas to the existing locations of disturbance by building the house and driveway in the same footprint and locating the cabana and pool on a manmade steep slope that is planted with ornamental vegetation. The project geotechnical report states there are no landslide hazards present on the site. Per the geotechnical report, the project can be constructed without the need for off-site construction easements through the use of temporary shoring walls.

D. Comments from Anita and William Neil

Summary: Concerns regarding the SEPA checklist and the amount of excavation, solar access, views, use of pervious pavement and site drainage, impacts to adjacent uses from noise, dust, traffic interruptions, utility service interruption, and loss of privacy. Concerns regarding temporary shoring rather than permanent, slope stability and the potential for slides, construction of the pool in the steep slope. The proposal is too large and proposes too much impervious surface.

Response: The amount of excavation and fill was reduced through use of soldier piles walls for the cabana and pool structure. The house was reduced in height to comply with the limits of the zoning code. FAR and the façade height limit is applicable to new development in order to prevent issues of bulk and height that can overshadow existing smaller development adjacent to a new house project. Temporary impacts from construction such as noise, traffic, and dust are mitigated by the City's existing codes and requirements that limit construction noise, traffic, and require erosion and sediment controls to prevent transport of dirt from the construction site. The proposal incorporates permanent shoring by using soldier pile walls. As previously discussed, the location of the pool avoids removal of the largest trees on the site and locates development in the area of the property that is already disturbed and in a degraded ecological condition. The proposed soldier pile walls have been shown to increase the stability of the existing slopes per the submitted geotechnical report for this project. The proposed house is larger than the existing house, but the proposal complies with the limits set by the zoning dimensional requirements in LUC 20.20.

E. Comments from Robert and Mary Watt

Summary: Concerns regarding the stability of the slopes resulting from the proposal, clarification on the demolition of the Watt's residence, view obstruction, potential for off-site impacts from the project, geotechnical monitoring of the slopes. A shoreline substantial development permit is required as a cabana and a pool are not listed

appurtenances in WAC 173-27-040. A smaller house would be more compatible with the neighboring homes and result in better minimization of impacts. A pool and cabana structure are not normal accessory structures in this neighborhood and eliminating them would avoid impacts.

Response: The submitted geotechnical report includes slope stability analysis which found that the proposed soldier piles walls will improve stability of the existing slope. The house is built per the zoning dimensional requirements of the Land Use Code which may allow a taller or larger house than exists on the site or on adjacent properties. Accessory structures are allowed and a detached accessory structure (cabana) and a pool are common residential improvements. As stated previously, the project is exempt from a shoreline substantial development permit and the applicant applied for a shoreline exemption. The cabana and pool are appurtenances as all eligible appurtenances do not need to be listed in the code or WAC. The proposed house is built in mostly the same footprint as the existing house which minimizes impacts. The cabana and pool are located on the site in disturbed areas that lack significant vegetation and are currently improved with managed ornamental landscaping. As the expected ecological function on the slope is low and the proposed placement avoids removal of large trees elsewhere on the site.

V. Summary of Technical Reviews

A. Clearing and Grading

The Clearing and Grading section of the Development Services Department has reviewed the proposed site development for compliance with clearing and grading codes and standards. The clearing and grading staff has approved the application with conditions regarding geotechnical review of the final construction plans, monitoring during construction, monitoring of turbidity, and pH, and rainy season restrictions. **See Conditions of Approval in Section X of this report**

VI. State Environmental Policy Act (SEPA)

Environmental review is required for the proposal under the State Environmental Policy Act (SEPA), Chapter 43.21C RCW and Washington Administrative Code (WAC) 197-11, and the City's Environmental Procedures Code, Chapter 22.02 of the Bellevue City Code (BCC). The Environmental Checklist together with information provided below (and in the official file) adequately discloses expected environmental impacts associated with the proposal. The environmental review indicates no probability of significant adverse environmental impacts occurring as a result of the proposal. Therefore, issuance of a Determination of Non-Significance (DNS) is the appropriate threshold determination under SEPA.

Adverse impacts which are less than significant are subject to City Codes or Standards, which are intended to mitigate those impacts. In cases where the City has adopted development regulations to systematically avoid or mitigate adverse impacts, those standards and regulations, where applicable, will normally constitute adequate mitigation of the impacts.

Where such impacts and regulatory items correspond, further documentation is not necessary. Where impacts and regulations do not correspond, or where unanticipated impacts are not mitigated by existing regulations, BCC 22.02.140 provides substantive authority to mitigate impacts disclosed through the environmental review process.

A discussion of the impacts associated with the project is noted below, together with any specific conditions of approval. These impacts will be mitigated to less than significant through exercise of Code authority as well as through project-specific Conditions of Approval contained in this report.

Construction of the house and all other improvements necessary to the house is exempt from SEPA per WAC 197-11-800(1) and BCC 22.02.032.D. The construction of the cabana and pool are not necessary to the construction of the house and are located in steep slope critical areas. These improvements are not exempt from SEPA which is reviewed as part of this proposal. The application was renoticed on February 28, 2019 to provide public notice of SEPA review.

A. Earth and Water

The site is adjacent to Lake Washington, but no work is proposed in the lake, below the ordinary high water mark. The proposal will connect to the existing storm outfall that drains to the lake through the bulkhead on the shoreline. The site does incorporate some pervious pavement in the flatter areas that will require engineering to ensure they can function on this sloping site. The proposal includes construction of a cabana and pool in and around a steep slope located between the house and the lake. The site is mapped with a liquefaction zone north of the house that is shown to be in the same location as the steep slope impacted by the cabana and pool. The submitted geotechnical analysis provided a test boring in this location and did not find liquefiable soils in the location of the cabana and pool. The proposed cabana requires excavation of 112 cubic yards, and which will removal the existing soils at this location. The house requires 812 cubic yards of excavation within the existing house footprint and additional excavation required for other improvements associated with the house outside the footprint. The City's codes and standards adequately address mitigation for any potential impacts from the proposed earthwork and construction. Temporary erosion and sedimentation control measures will be required. Erosion and sedimentation control requirements and BMPs will be reviewed by the Clearing and Grading Department as part of building permit 19-105706-BS. Erosion and sediment control best management practices include the installation of silt fencing around the work area, covering exposed soils, and limitation on working in wet conditions **See Condition of Approval related to erosion and sediment control in Section X of this report.**

B. Plants and Animals

Significant vegetation is sparse on the property with larger trees located near the driveway upslope of the existing and proposed house. The steep slope proposed to be impacted by the cabana is covered in maintained ornamental vegetation and landscaping improvements

which will be removed by construction of the cabana and pool. As discussed previously the project proposes removal of four trees, two of which are native and fairly large but were shown to be in poor health. Two other trees for removal are actually noxious species. However, neither of these trees are located in a steep slope. The project includes 3,257 square feet of native planting to be installed as mitigation required as part of the Critical Areas Land Use Permit. Planting proposed includes installation of 10 evergreen trees in addition to native deciduous trees. With the implementation of the proposed mitigation plan, the resulting site will have improved ecological function and value.

C. Traffic

Traffic associated with construction will be temporary and construction vehicles are required to park on the property. The proposed house has been reviewed and approved by the Right-of-way division under associated building permit 19-105706-BS.

D. Aesthetics

The proposed height of the house is subject to the height limits of the Land Use Code and the shoreline regulations. Mass of the proposed house is also governed by Floor Area Ratio and Lot coverage. No significant impacts will result from the proposed development with the application of these code standards.

VII. Changes to Proposal Due to Staff Review

The applicant revised design of the cabana, pool and patio on the site to avoid and minimize alteration of the steep slope through the use of soldier pile walls as permanent shoring. The pool was redesigned to avoid placement of fill on the steep slope. The applicant reduced the height of the proposed house to comply with the height limits of the land use code. The proposed coverage of impervious surface was reduced, and some pervious pavement was incorporated to meet the requirements of the land use code. Tree removal was required to be avoided and the applicant revised plans to limit tree removal. Conformance with all zoning requirements will be verified through review of building permit 19-105706-BS. **See Condition of Approval in Section X of this report.**

VIII. Decision Criteria

A. 20.25H.255.A Critical Areas Report Decision Criteria

Except for the proposals described in subsection B of this section, the Director may approve, or approve with modifications, the proposed modification where the applicant demonstrates:

1. **The modifications and performance standards included in the proposal lead to levels of protection of critical area functions and values at least as protective as application of the regulations and standards of this code;**

   Finding: The submitted critical areas report documents that the existing site has degraded ecological function as most of the site is modified or consists of ornamental

vegetation. The proposal locates the proposed house, accessory structures and other improvements in mostly the same location as existing improvements and disturbances. The biologist found that the resulting site will retain habitat functions that will be enhanced by the proposed mitigation.

2. **Adequate resources to ensure completion of any required mitigation and monitoring efforts;**
   Finding: A mitigation and monitoring plan was created for the project to establish new vegetation. The plan includes performance standards and provides a five year monitoring program to ensure successful installation. An installation surety at 150 percent of the cost of plants, materials, and labor as well as a maintenance surety at 100 percent of the cost of monitoring will be required. **See Condition of Approval in Section X of this report.**

3. **The modifications and performance standards included in the proposal are not detrimental to the functions and values of critical area and critical area buffers off-site; and**
   Finding: The submitted critical areas report documents that the functions and values of the site will improve the habitat quality and slope stability functions and will not have a detrimental effect on critical areas and buffers offsite.

4. **The resulting development is compatible with other uses and development in the same land use district.**
   Finding: The proposed house and associated structures and improvements are allowed uses in the R-4 single-family residential zone.

B. 20.25H.255.B Critical Areas Report Decision Criteria
The Director may approve, or approve with modifications, a proposal to reduce the regulated critical area buffer on a site where the applicant demonstrates

1. **The proposal includes plans for restoration of degraded critical area or critical area buffer functions which demonstrate a net gain in overall critical area or critical area buffer functions;**
   Finding: The submitted critical areas report identifies the on-site steep slope critical area, buffers, setbacks, and shoreline structure setback as having limited function and value compared to a natural undisturbed site. Vegetation coverage consists of non-native and invasive species with some areas void of any vegetation. The proposed mitigation will replace the existing vegetation with native plants consisting of trees, shrubs, and ground cover. The established vegetation will provide improved water quality, slope stability, and habitat quality. See functional discussion in the submitted critical areas report that is reference document 3. **See Conditions of Approval for mitigation planting in Section X of this report**

2. **The proposal includes plans for restoration of degraded critical area or critical area buffer functions which demonstrate a net gain in the most important critical area or critical area buffer functions to the ecosystem in which they exist;**
   Finding: The site contains both invasive and non-native plant coverage resulting in a lack of species diversity within the critical area and adjacent to the lake. The proposed mitigation will remove improvements, invasive plants, and non-native vegetation and replace them with native species that will improve structure diversity and provide new trees on a site that currently lacks tree coverage within the critical area.

3. **The proposal includes a net gain in stormwater quality function by the critical area buffer or by elements of the development proposal outside of the reduced regulated critical area buffer;**
   Finding: The proposed increase of vegetation cover will improve stormwater quality on the property. Increased coverage by native vegetation will improve stormwater filtering and overall water quality.

4. **Adequate resources to ensure completion of any required restoration, mitigation and monitoring efforts;**
   Finding: See responses in section A above.

5. **The modifications and performance standards included in the proposal are not detrimental to the functions and values of critical area and critical area buffers off-site; and**
   Finding: See responses in section A above.

6. **The resulting development is compatible with other uses and development in the same land use district.**
   Finding: See responses in section A above.

B. 20.30P.140 Critical Area Land Use Permit Decision Criteria – Decision Criteria
The Director may approve, or approve with modifications an application for a Critical Area Land Use Permit if:

1. **The proposal obtains all other permits required by the Land Use Code;**
   The applicant must obtain approval of building permit 19-105706-BS before beginning any work. **See Conditions of Approval in Section X of this report.**

2. **The proposal utilizes to the maximum extent possible the best available construction, design and development techniques which result in the least impact on the critical area and critical area buffer;**
   The proposed house is generally located in the same location as the existing house which avoids impacting area of the property that isn't already improved. The proposed cabana and pool are located in an area that is already disturbed by improvements and

lacks vegetation other than ornamental and invasive species with no significant trees present. Placement of the pool elsewhere on the site would impact site access and likely require removal of the few significant trees the site possesses. While not a decision criteria for this permit, privacy would be impacted if the pool was placed closer to adjacent properties. The existing site is degraded, and the proposal will provide new native vegetation that will improve overall ecological function on the site. The purpose of the critical areas regulations in LUC 20.25H is to protect critical area function and value while still allowing reasonable development to occur. The proposed project results in a site that can be expected to retain existing habitat functions and improve upon them through the planting of native vegetation.

3. **The proposal incorporates the performance standards of Part 20.25H to the maximum extent applicable, and ;**
   As discussed in Section III of this report, the performance standards of LUC 20.25H are being met or exceeded.

4. **The proposal will be served by adequate public facilities including street, fire protection, and utilities; and;**
   The proposed activity will be served by adequate public facilities.

5. **The proposal includes a mitigation or restoration plan consistent with the requirements of LUC Section 20.25H.210; and**
   A mitigation planting plan has been submitted. An installation and maintenance surety will be required to ensure plant survival over the 5-year monitoring period. **See Conditions of Approval in Section X of this report.**

6. **The proposal complies with other applicable requirements of this code.**
   As discussed in this report, the proposal complies with all other applicable requirements of the Land Use Code.

IX. Conclusion and Decision

After conducting the various administrative reviews associated with this proposal, including Land Use Code consistency, SEPA, City Code and Standard compliance reviews, the Director of the Development Services Department does hereby **approve with conditions** the Critical Areas Land Use Permit to construct a new house, associated improvements, and mitigation planting on the property. **Approval of this Critical Areas Land Use Permit does not constitute a permit for construction. A building permit is required and all plans are subject to review for compliance with applicable City of Bellevue codes and standards.**

Note - Expiration of Critical Area Permit Approval: In accordance with LUC 20.30P.150, a Critical Areas Land Use Permit automatically expires and is void if the applicant fails to file for a building permit or other necessary development permits within one year of the effective date of the approval.

X. Conditions of Approval

The applicant shall comply with all applicable Bellevue City Codes and Ordinances including but not limited to:

Applicable Ordinances	Contact Person
Clearing and Grading Code- BCC 23.76	Tom McFarlane, 425-452-5207
Land Use Code- BCC Title 20	Reilly Pittman, 425-452-4350
Noise Control- BCC 9.18	Reilly Pittman, 425-452-4350

The following conditions are imposed under the Bellevue City Code or SEPA authority referenced:

1. **Building Permit Required:** Approval of this Critical Areas Land Use Permit does not constitute an approval of a building permit. Application 19-105706-BS must be approved before any construction may begin. Plans submitted as part of the building permit application shall be consistent with the activity permitted under this approval.

   Authority: Land Use Code 20.30P.140
   Reviewer: Reilly Pittman, Development Services Department

2. **Hold Harmless Agreement:** The applicant shall submit a hold harmless agreement in a form approved by the City Attorney which releases the City from liability for any damage arising from the location of improvements within a critical area buffer in accordance with LUC 20.30P.170. The hold harmless agreement is required to be recorded with King County prior to building permit issuance. Staff will provide the applicant with the hold harmless form.

   Authority: Land Use Code 20.30P.170
   Reviewer: Reilly Pittman, Development Services Department

3. **Guest Cottage Agreement:** The applicant shall complete and record a guest cottage agreement to ensure the proposed cabana structure is not rented and is maintained as a non-rentable guest cottage. The agreement is required to be recorded with King Count prior to building permit issuance. Staff will provide the applicant with the guest cottage agreement form.

   Authority: Land Use Code 20.20.250
   Reviewer: Reilly Pittman, Development Services Department

4. **Mitigation Planting:** The proposed mitigation planting shown on the submitted planting plan included as reference document 1 is required to be installed. The planting plan is required to be submitted and approved prior to building permit issuance. All permanent

and temporary disturbance is required to be mitigated and/or restored.
Authority: Land Use Code 20.30P.140
Reviewer: Reilly Pittman, Development Services Department

Authority: Land Use Code 20.30P.140; 20.25H.220
Reviewer: Reilly Pittman, Development Services Department

5. **Cost Estimate:** A cost estimate is required to be submitted prior to building permit issuance for the cost to install and maintain and monitor the planting for five years.

   Authority: Land Use Code 20.30P.140
   Reviewer: Reilly Pittman, Development Services Department

6. **Installation Surety:** In order to ensure mitigation planting is installed per plan an installation surety is required in an amount that is 150 percent of the cost to install the mitigation planting. The installation surety will be released upon installation of the mitigation and inspection by staff. The installation surety is required to be submitted prior to building permit issuance.

   Authority: Land Use Code 20.30P.140
   Reviewer: Reilly Pittman, Development Services Department

7. **Maintenance Surety:** In order to ensure the restoration successfully establishes, a maintenance surety is required for an amount equal to 100 percent of the cost to maintain and monitor the mitigation for five years. The surety shall be held for a period of five years from the date of successful installation. The maintenance assurance device will be released to the applicant upon receipt of documentation of reporting successful establishment in compliance with the performance standards described in the submitted critical areas report as reference document 3.

   Authority: Land Use Code 20.30P.140
   Reviewer: Reilly Pittman, Development Services Department

8. **Monitoring:** The planting area shall be maintained and monitored for 5 years as detailed in the monitoring plan, goals, and performance standards found in the submitted critical areas report reference document 3.

   Annual monitoring reports are to be submitted to Land Use each of the five years. The reports, along with a copy of the planting plan, can be sent to Reilly Pittman at rpittman@bellevuewa.gov or to the address below:

   Environmental Planning Manager
   Development Services Department

City of Bellevue
PO Box 90012
Bellevue, WA 98009-9012

Authority: Land Use Code 20.30P.140; 20.25H.220
Reviewer: Reilly Pittman, Development Services Department

9. **Land Use Inspection Required:** Inspection of mitigation planting must be completed by the Land Use Planner as part of the building permit inspection process. A Land Use inspection will be added to the building permit.

   Authority: Land Use Code 20.25H.210
   Reviewer: Reilly Pittman, Development Services Department

10. **Geotechnical Recommendations:** All work is required to be carried out per the recommendations provided by the geotechnical engineer.

    Authority: Land Use Code 20.30P.140
    Reviewer: Reilly Pittman, Development Services Department

11. **Geotechnical Review:** The project geotechnical engineer must review the final construction plans, including all foundation, retaining wall, shoring, and vault designs. A letter from the geotechnical engineer stating that the plans conform to the recommendations in the geotechnical report and any addendums and supplements must be submitted to the clearing and grading section prior to issuance of the construction permit.

    Authority: Clearing & Grading Code 23.76.050
    Reviewer: Tom McFarlane, Development Services Department

12. **Geotechnical Inspection:** The project geotechnical engineer must provide geotechnical inspection during project construction, including monitoring and testing of soil cuts and fill, subgrades for foundations and footing, utility trench backfill, and any unusual seepage, slope, or subgrade conditions.

    Authority: Clearing & Grading Code 23.76.050; 23.76.160
    Reviewer: Tom McFarlane, Development Services Department

13. **Turbidity and pH Monitoring Required:** A turbidity and pH monitoring plan must be submitted and approved prior to issuance of the clearing and grading permit, and the plan must be implemented during site work. The plan must be developed and implemented in accordance with the Turbidity & pH Monitoring Requirements contained in the Bellevue Clearing & Grading Development Standards.

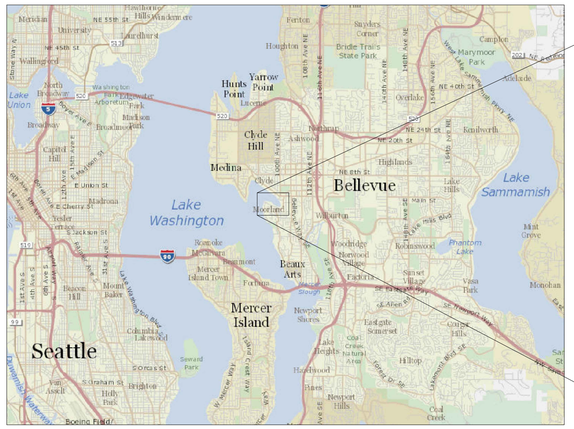
    Authority: Clearing & Grading Code 23.76.160

Reviewer: Tom McFarlane, Development Services Department

14. **Rainy Season Restrictions:** Due to steep slopes on the site, no clearing and grading activity may occur during the rainy season, which is defined as October 1 through April 30 without written authorization of the Development Services Department. Should approval be granted for work during the rainy season, increased erosion and sedimentation measures, representing the best available technology must be implemented prior to beginning or resuming site work.

    Authority: Bellevue City Code 23.76.093.A,
    Reviewer: Tom McFarlane, Development Services Department

SADIS MITIGATION PLAN

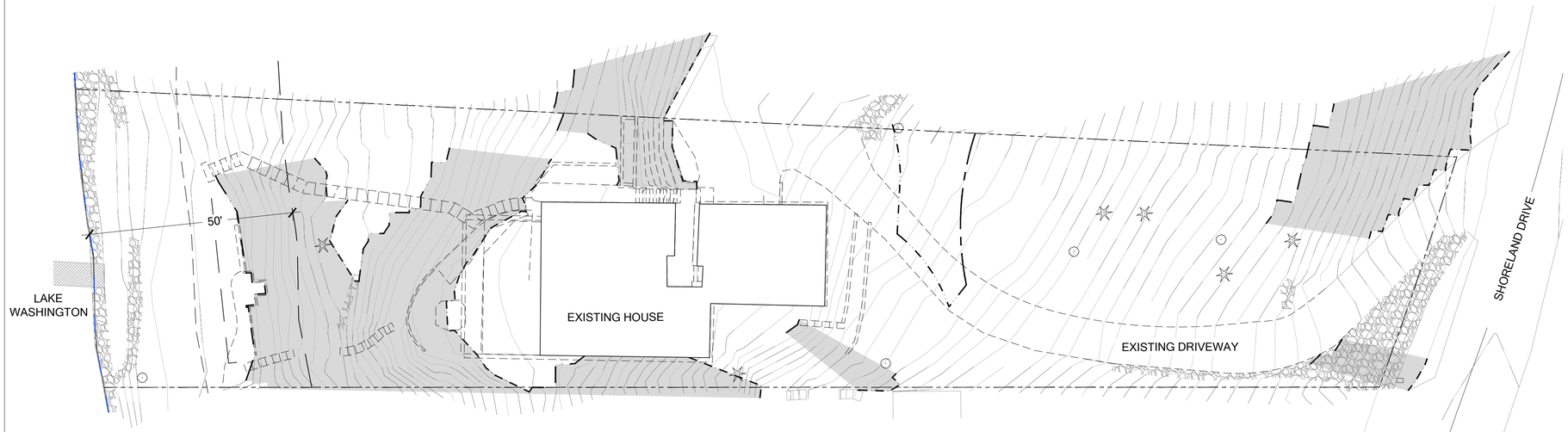


VICINITY MAPS

SHEET INDEX

NOTES

1. SURVEY PERFORMED ON 08/13/18 BY TERRANE. 10801 MAIN STREET, SUITE 102, BELLEVUE, WA 98004. PHONE: (425)458-4488.



LEGEND

- PARCEL BOUNDARY
- STEEP SLOPE AREA
- TOP OF SLOPE
- TOE OF SLOPE
- TOP OF SLOPE BUFFER (50-FT)
- TOE OF SLOPE SETBACK (75-FT)
- SHORELINE OHWM
- 50-FT SHORELINE STRUCTURE SETBACK

EXISTING CONDITIONS

SCALE: 1/16" = 1'

0 8' 16' 32' 64'

Know what's **below.** **Call** before you dig.

THE WATERSHED COMPANY
750 Sixth Street South
Kirkland WA 98033
p 425.822.5242
www.watershedco.com
Science & Design

MITIGATION PLAN
SADIS PROPERTY DEVELOPMENT
PREPARED FOR: DAVID SADIS
PARCEL # 7768700120
9312 SE SHORELAND DR
BELLEVUE, WA 98004

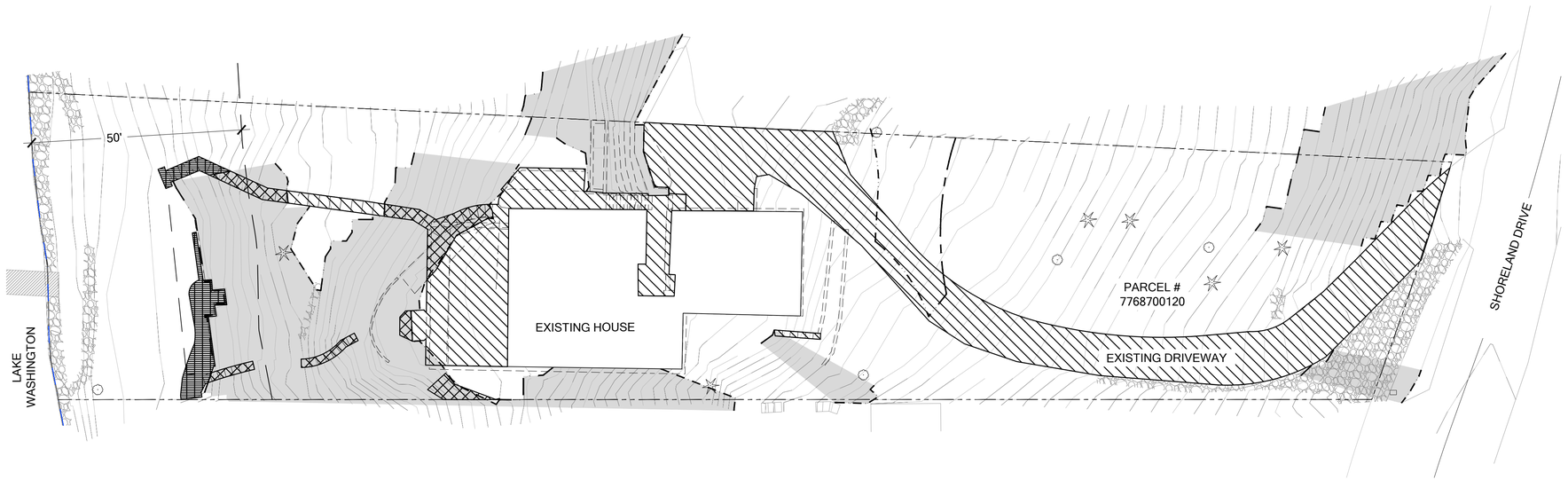
SUBMITTALS & REVISIONS

NO.	DATE	DESCRIPTION	BY
	12-31-18	MITIGATION PLAN	LM
1	08-13-2019	MITIGATION PLAN REVISIONS	AF

SHEET SIZE:
ORIGINAL PLAN IS 22" x 34".
SCALE ACCORDINGLY.

PROJECT MANAGER: KJB
DESIGNED: LM
DRAFTED: LM,AF
CHECKED: KJB
JOB NUMBER:
180701
SHEET NUMBER:
W1 OF 6

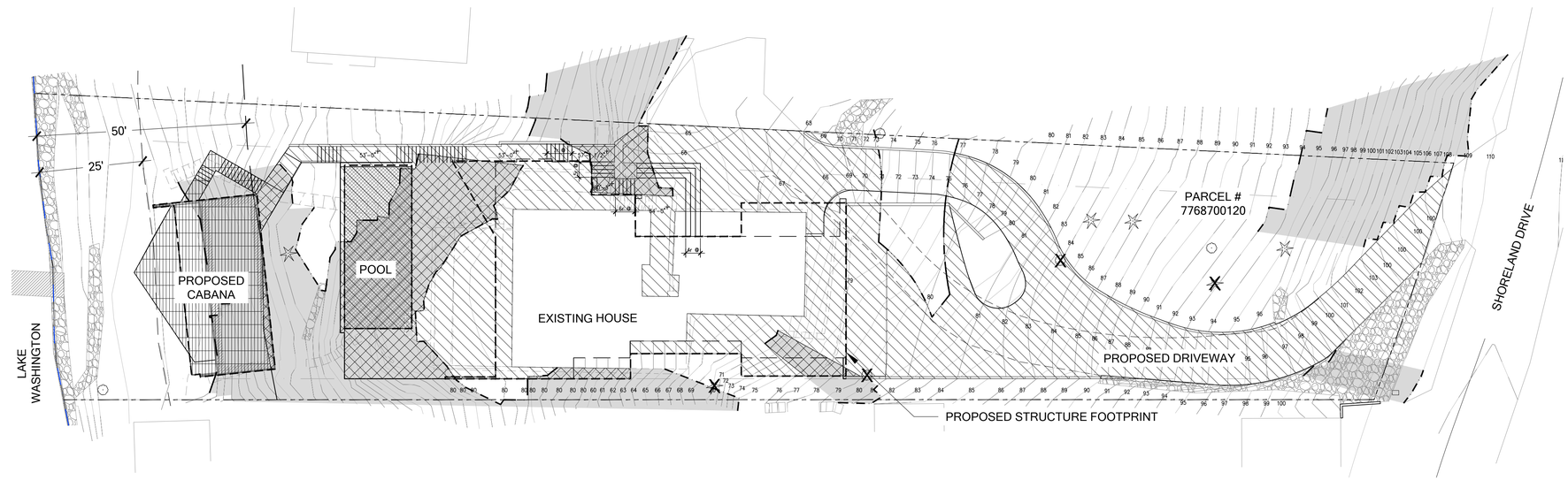
FILENAME
PRINTED BY
DATE



EXISTING IMPACTS

LEGEND

- PARCEL BOUNDARY
- TOP OF SLOPE
- TOE OF SLOPE
- TOP OF SLOPE BUFFER
- TOE OF SLOPE SETBACK
- STEEP SLOPE AREA
- STEEP SLOPE IMPACT (302 SF)
- STEEP SLOPE BUFFER/SETBACK IMPACT (3,726 SF)
- SHORELINE SETBACK IMPACT (215 SF)
- SHORELINE OHWM
- 50-FT SHORELINE STRUCTURE SETBACK



PROPOSED IMPACTS

LEGEND

- PARCEL BOUNDARY
- TOP OF SLOPE
- TOE OF SLOPE
- TOP OF SLOPE BUFFER
- TOE OF SLOPE SETBACK
- STEEP SLOPE AREA
- STEEP SLOPE IMPACT (1,698 SF)
- STEEP SLOPE BUFFER/SETBACK IMPACT (6,408 SF)
- SHORELINE SETBACK IMPACT (1,096 SF)
- SHORELINE OHWM
- 50-FT STANDARD SHORELINE SETBACK
- 25-FT REDUCED SHORELINE SETBACK
- TREE TO BE REMOVED

IMPACTS PLAN

SCALE: 1/16" = 1'

0 8' 16' 32' 64'

Know what's below. Call before you dig.

THE WATERSHED COMPANY
750 Sixth Street South
Kirkland WA 98033
p 425.822.5242
www.watershedco.com
Science & Design

MITIGATION PLAN

SADIS PROPERTY DEVELOPMENT
PREPARED FOR: DAVID SADIS
PARCEL # 7768700120
9312 SE SHORELAND DR
BELLEVUE, WA 98004

SUBMITTALS & REVISIONS

NO.	DESCRIPTION	DATE	BY
	MITIGATION PLAN	12-31-18	LM
1	MITIGATION PLAN REVISIONS	08-13-2019	AF

SHEET SIZE:
ORIGINAL PLAN IS 22" x 34".
SCALE ACCORDINGLY.

PROJECT MANAGER: KJB
DESIGNED: LM
DRAFTED: LM,AF
CHECKED: KJB
JOB NUMBER:
180701
SHEET NUMBER:
W2 OF 6

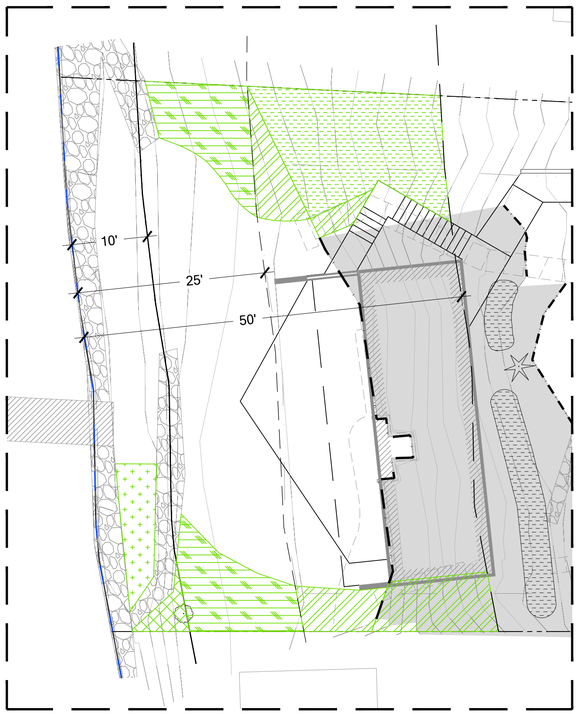
FILENAME
PRINTED BY
DATE

SHORELINE IMPACT INSET PLAN

SCALE: 1" = 10'

LEGEND

- 0 TO 25 FEET FROM SHORELINE
  - LAWN (42 SF)
- 25 TO 50 FEET FROM SHORELINE
  - IMPERVIOUS SURFACE (237 SF)
  - LAWN OR INVASIVE SPECIES (318 SF)
  - NATIVE VEGETATION (688 SF)
- SHORELINE OHWM
- 50-FT SHORELINE STRUCTURE SETBACK
- 25-FT SETBACK

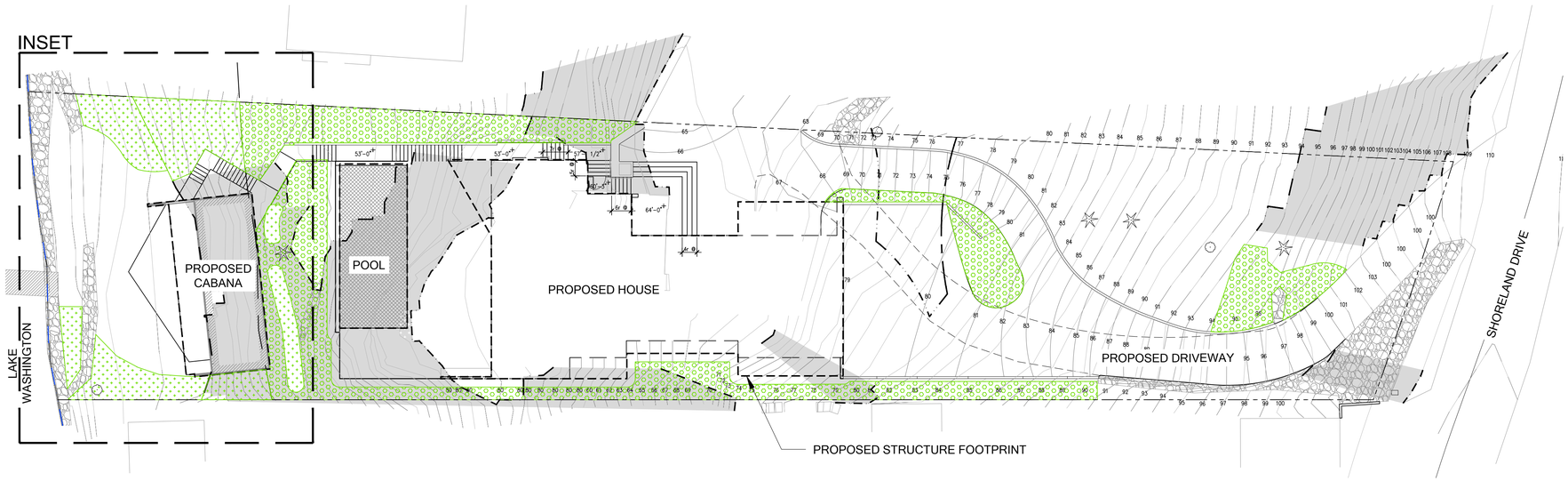


SHORELINE MITIGATION INSET PLAN

SCALE: 1" = 10'

LEGEND

- NATIVE OVERHANGING VEGETATION 0-10 FEET FROM OHWM (75 SF) (PURSUANT TO 20.225E.065.F.8.c.iv)
- NATIVE OVERHANGING VEGETATION 0-10 FEET FROM OHWM (26 SF)
- NATIVE VEGETATION 10-25 FEET FROM OHWM (290 SF)
- NATIVE VEGETATION 25-50 FEET FROM OHWM (248 SF)
- VEGETATION RETENTION 25-50 FEET FROM OHWM (324 SF)
- SWALE 0-200 FEET FROM OHWM (143 SF)
- SHORELINE OHWM
- 50-FT SHORELINE STRUCTURE SETBACK
- 25-FT SETBACK
- 10-FT FROM OHWM



LEGEND

- PARCEL BOUNDARY
- TOP OF SLOPE
- TOE OF SLOPE
- TOP OF SLOPE BUFFER
- TOE OF SLOPE SETBACK
- SHORELINE SETBACK MITIGATION (1,106 SF)
- STEEP SLOPE BUFFER SETBACK MITIGATION (3,024 SF)
- SHORELINE OHWM
- OHWM 50-FT BUFFER
- OHWM 25-FT BUFFER

SHORELINE IMPACTS & MITIGATION PLAN

SCALE: 1/16" = 1'

0 8' 16' 32' 64'

Know what's below. Call before you dig.

THE WATERSHED COMPANY
750 Sixth Street South
Kirkland WA 98033
p 425.822.5242
www.watershedco.com
Science & Design

MITIGATION PLAN

SADIS PROPERTY DEVELOPMENT
PREPARED FOR: DAVID SADIS
PARCEL # 7768700120
9312 SE SHORELAND DR
BELLEVUE, WA 98004

SUBMITTALS & REVISIONS

NO.	DATE	DESCRIPTION	BY
	12-31-18	MITIGATION PLAN	LM
1	08-13-2019	MITIGATION PLAN REVISIONS	AF

SHEET SIZE:
ORIGINAL PLAN IS 22" x 34".
SCALE ACCORDINGLY.

PROJECT MANAGER: KJB
DESIGNED: LM
DRAFTED: LM,AF
CHECKED: KJB
JOB NUMBER:
180701
SHEET NUMBER:
W3 OF 6

FILENAME
PRINTED BY
DATE

PLANT SCHEDULE (SHORELINE BUFFER)

		SIZE	SPACING	QTY
	TREES			
	THUJA PLUCATA / WESTERN RED CEDAR	2 GAL	AS SHOWN ON PLANS	4
	SALIX SCOULERIANA / SCOULER'S WILLOW	2 GAL		2
	SHRUBS			
	LONICERA INVOLUCRATA / TWINBERRY	1 GAL	6' O.C.	8
	CORNUS SERICEA / REDTWIG DOGWOOD	1 GAL	4' O.C.	12
	RIBES SANGUINEUM / RED-FLOWERING CURRENT	1 GAL	4' O.C.	12
	MAHONIA AQUIFOLIUM / TALL OREGON GRAPE	1 GAL	4' O.C.	12
	GROUNDCOVER			
	POLYSTICHUM MUNITUM / SWORD FERN	1 GAL	24" O.C.	30
	FRAGARIA CHILOENSIS / BEACH STRAWBERRY	1 GAL	24" O.C	30
	GUALTHERIA SHALLON / SALAL	1 GAL	24" O.C	30

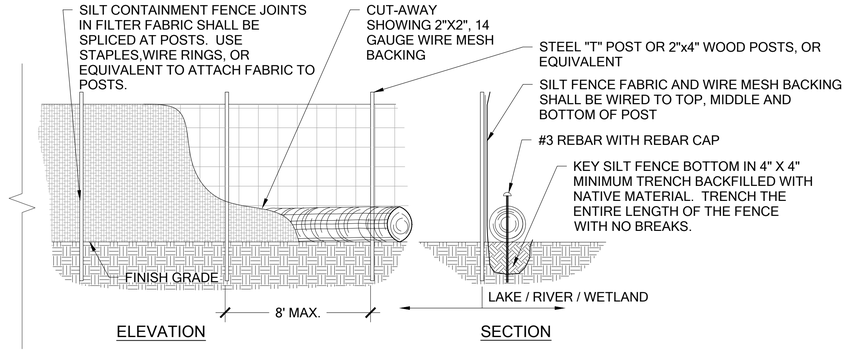
PLANT SCHEDULE (STEEP SLOPE & BUFFER)

		SIZE	SPACING	QTY
	TREES			
	PSEUDOTSUGA MENZIESII / DOUGLAS-FIR	2 GAL	AS SHOWN ON PLANS	3
	THUJA PLUCATA / WESTERN RED CEDAR	2 GAL		3
	PICEA SITCHENSIS / SITKA SPRUCE	2 GAL		4
	ACER CIRCINATUM / VINE MAPLE	2 GAL		5
	SHRUBS			
	OEMLERIA CERASIFORMIS / OSOBERRY	1 GAL	6' O.C.	24
	SYMPHORICARPUS ALBUS / SNOWBERRY	1 GAL	4' O.C.	54
	RIBES SANGUINEUM / RED-FLOWERING CURRENT	1 GAL	4' O.C.	54
	MAHONIA AQUIFOLIUM / TALL OREGON GRAPE	1 GAL	4' O.C.	54
	GROUNDCOVER			
	POLYSTICHUM MUNITUM / SWORD FERN	1 GAL	24" O.C.	223
	FRAGARIA CHILOENSIS / BEACH STRAWBERRY	1 GAL	24" O.C.	223
	GUALTHERIA SHALLON / SALAL	1 GAL	24" O.C.	223

NOTES

1. PIT AMEND WHERE EXISTING NATIVE SPECIES ARE PRESENT ON STEEP SLOPES AND IN BUFFER AREAS (W5, D).
2. IN SHORELINE BUFFER PLANTING AREA AMEND EXISTING SOILS (W5, E)

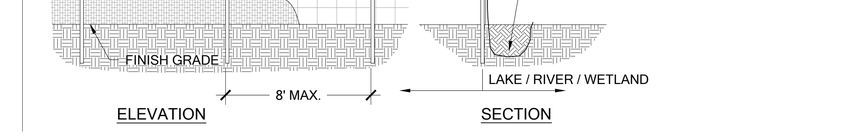
SILT FENCE MAINTENANCE STANDARDS:
1. ANY DAMAGE SHALL BE REPAIRED IMMEDIATELY.
2. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATION EXCEEDS 6" IN DEPTH.



A SILT FENCE & BIODEGRADABLE WATTLE

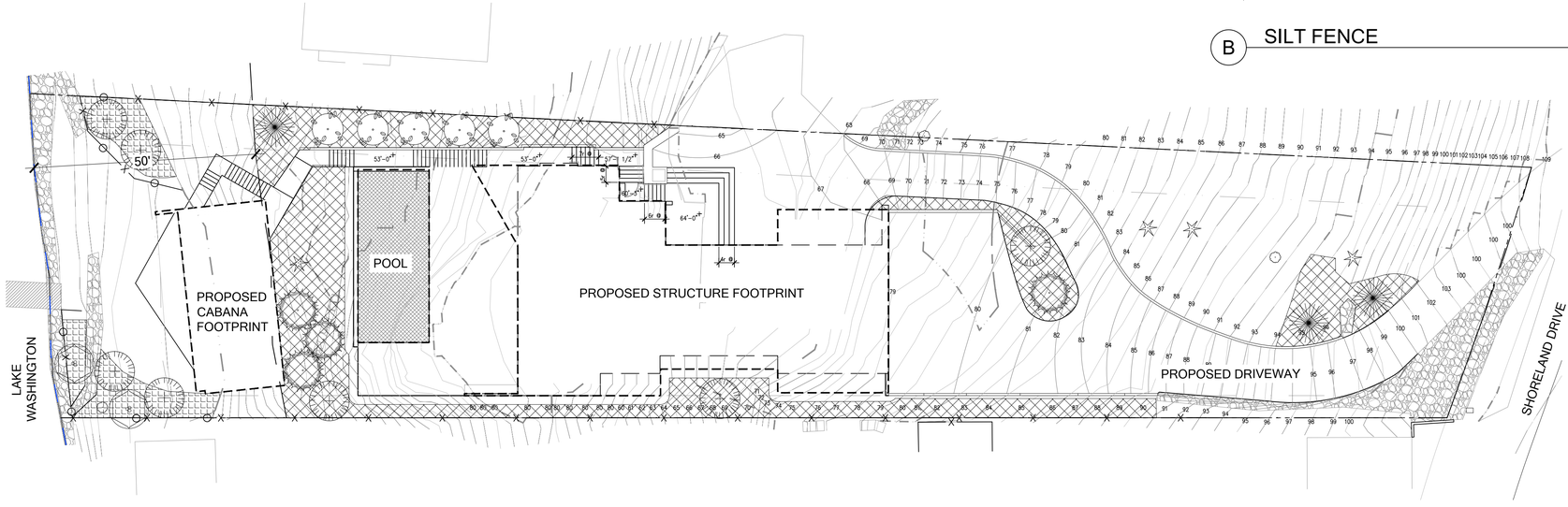
Scale: NTS

SILT FENCE MAINTENANCE STANDARDS:
1. ANY DAMAGE SHALL BE REPAIRED IMMEDIATELY.
2. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATION EXCEEDS 6" IN DEPTH.



B SILT FENCE

Scale: NTS



LEGEND

- PARCEL BOUNDARY
- TOP OF SLOPE
- TOE OF SLOPE
- TOP OF SLOPE BUFFER
- TOE OF SLOPE SETBACK
- SHORELINE OHWM
- OHWM 50-FT BUFFER
- OHWM 25-FT BUFFER
- SILT FENCE (382-LF) (W4, B)
- SILT FENCE & BIODEGRADABLE WATTLE (112-LF) (W4, A)

PLANTING PLAN

SCALE: 1/16" = 1'

0 8' 16' 32' 64'

Know what's below. Call before you dig.

THE WATERSHED COMPANY
750 Sixth Street South
Kirkland WA 98033
p 425.822.5242
www.watershedco.com
Science & Design

MITIGATION PLAN

SADIS PROPERTY DEVELOPMENT
PREPARED FOR: DAVID SADIS
PARCEL # 7768700120
9312 SE SHORELAND DR
BELLEVUE, WA 98004

SUBMITTALS & REVISIONS

NO.	DATE	DESCRIPTION	BY
	12-31-18	MITIGATION PLAN	LM
1	08-13-2019	MITIGATION PLAN REVISIONS	AF

SHEET SIZE:
ORIGINAL PLAN IS 22" x 34".
SCALE ACCORDINGLY.

PROJECT MANAGER: KJB
DESIGNED: LM
DRAFTED: LM,AF
CHECKED: KJB
JOB NUMBER:
180701
SHEET NUMBER:
W4 OF 6

FILENAME
PRINTED BY
DATE

PLANT INSTALLATION SPECIFICATIONS

GENERAL NOTES

QUALITY ASSURANCE
1. PLANTS SHALL MEET OR EXCEED THE SPECIFICATIONS OF FEDERAL, STATE, AND LOCAL LAWS REQUIRING INSPECTION FOR PLANT DISEASE AND INSECT CONTROL.
2. PLANTS SHALL BE HEALTHY, VIGOROUS, AND WELL-FORMED, WITH WELL DEVELOPED, FIBROUS ROOT SYSTEMS, FREE FROM DEAD BRANCHES OR ROOTS. PLANTS SHALL BE FREE FROM DAMAGE CAUSED BY TEMPERATURE EXTREMES, LACK OR EXCESS OF MOISTURE, INSECTS, DISEASE, AND MECHANICAL INJURY. PLANTS IN LEAF SHALL BE WELL FOLIATED AND OF GOOD COLOR. PLANTS SHALL BE HABITUATED TO THE OUTDOOR ENVIRONMENTAL CONDITIONS INTO WHICH THEY WILL BE PLANTED (HARDENED-OFF).
3. TREES WITH DAMAGED, CROOKED, MULTIPLE OR BROKEN LEADERS WILL BE REJECTED. WOODY PLANTS WITH ABRASIONS OF THE BARK OR SUN SCALD WILL BE REJECTED.
4. NOMENCLATURE: PLANT NAMES SHALL CONFORM TO FLORA OF THE PACIFIC NORTHWEST BY HITCHCOCK AND CRONQUIST, UNIVERSITY OF WASHINGTON PRESS, 1973 AND/OR TO A FIELD GUIDE TO THE COMMON WETLAND PLANTS OF WESTERN WASHINGTON & NORTHWESTERN OREGON, ED. SARAH SPEAR COOKE, SEATTLE AUDUBON SOCIETY, 1997.

DEFINITIONS
1. PLANTS/PLANT MATERIALS. PLANTS AND PLANT MATERIALS SHALL INCLUDE ANY LIVE PLANT MATERIAL USED ON THE PROJECT. THIS INCLUDES BUT IS NOT LIMITED TO CONTAINER GROWN, B&B OR BAREROOT PLANTS; LIVE STAKES AND FASCINES (WATTLES); TUBERS, CORMS, BULBS, ETC..; SPRIGS, PLUGS, AND LINERS.
2. CONTAINER GROWN. CONTAINER GROWN PLANTS ARE THOSE WHOSE ROOTBALLS ARE ENCLOSED IN A POT OR BAG IN WHICH THAT PLANT GREW.

SUBSTITUTIONS
1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN SPECIFIED MATERIALS IN ADVANCE IF SPECIAL GROWING, MARKETING OR OTHER ARRANGEMENTS MUST BE MADE IN ORDER TO SUPPLY SPECIFIED MATERIALS.
2. SUBSTITUTION OF PLANT MATERIALS NOT ON THE PROJECT LIST WILL NOT BE PERMITTED UNLESS AUTHORIZED IN WRITING BY THE RESTORATION CONSULTANT.
3. IF PROOF IS SUBMITTED THAT ANY PLANT MATERIAL SPECIFIED IS NOT OBTAINABLE, A PROPOSAL WILL BE CONSIDERED FOR USE OF THE NEAREST EQUIVALENT SIZE OR ALTERNATIVE SPECIES, WITH CORRESPONDING ADJUSTMENT OF CONTRACT PRICE.
4. SUCH PROOF WILL BE SUBSTANTIATED AND SUBMITTED IN WRITING TO THE CONSULTANT AT LEAST 30 DAYS PRIOR TO START OF WORK UNDER THIS SECTION.

INSPECTION
1. PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE RESTORATION CONSULTANT FOR CONFORMANCE TO SPECIFICATIONS, EITHER AT TIME OF DELIVERY ON-SITE OR AT THE GROWER'S NURSERY. APPROVAL OF PLANT MATERIALS AT ANY TIME SHALL NOT IMPAIR THE SUBSEQUENT RIGHT OF INSPECTION AND REJECTION DURING PROGRESS OF THE WORK.
2. PLANTS INSPECTED ON SITE AND REJECTED FOR NOT MEETING SPECIFICATIONS MUST BE REMOVED IMMEDIATELY FROM SITE OR RED-TAGGED AND REMOVED AS SOON AS POSSIBLE.
3. THE RESTORATION CONSULTANT MAY ELECT TO INSPECT PLANT MATERIALS AT THE PLACE OF GROWTH. AFTER INSPECTION AND ACCEPTANCE, THE RESTORATION CONSULTANT MAY REQUIRE THE INSPECTED PLANTS BE LABELED AND RESERVED FOR PROJECT. SUBSTITUTION OF THESE PLANTS WITH OTHER INDIVIDUALS, EVEN OF THE SAME SPECIES AND SIZE, IS UNACCEPTABLE.

MEASUREMENT OF PLANTS
1. PLANTS SHALL CONFORM TO SIZES SPECIFIED UNLESS SUBSTITUTIONS ARE MADE AS OUTLINED IN THIS CONTRACT.
2. HEIGHT AND SPREAD DIMENSIONS SPECIFIED REFER TO MAIN BODY OF PLANT AND NOT BRANCH OR ROOT TIP TO TIP. PLANT DIMENSIONS SHALL BE MEASURED WHEN THEIR BRANCHES OR ROOTS ARE IN THEIR NORMAL POSITION.
3. WHERE A RANGE OF SIZE IS GIVEN, NO PLANT SHALL BE LESS THAN THE MINIMUM SIZE AND AT LEAST 50% OF THE PLANTS SHALL BE AS LARGE AS THE MEDIAN OF THE SIZE RANGE. (EXAMPLE: IF THE SIZE RANGE IS 12" TO 18", AT LEAST 50% OF PLANTS MUST BE 15" TALL.).

SUBMITTALS

PROPOSED PLANT SOURCES
1. WITHIN 45 DAYS AFTER AWARD OF THE CONTRACT, SUBMIT A COMPLETE LIST OF PLANT MATERIALS PROPOSED TO BE PROVIDED DEMONSTRATING CONFORMANCE WITH THE REQUIREMENTS SPECIFIED. INCLUDE THE NAMES AND ADDRESSES OF ALL GROWERS AND NURSERIES.

PRODUCT CERTIFICATES
1. PLANT MATERIALS LIST - SUBMIT DOCUMENTATION TO CONSULTANT AT LEAST 30 DAYS PRIOR TO START OF WORK UNDER THIS SECTION THAT PLANT MATERIALS HAVE BEEN ORDERED. ARRANGE PROCEDURE FOR INSPECTION OF PLANT MATERIAL WITH CONSULTANT AT TIME OF SUBMISSION.
2. HAVE COPIES OF VENDOR'S OR GROWERS' INVOICES OR PACKING SLIPS FOR ALL PLANTS ON SITE DURING INSTALLATION. INVOICE OR PACKING SLIP SHOULD LIST SPECIES BY SCIENTIFIC NAME, QUANTITY, AND DATE DELIVERED (AND GENETIC ORIGIN IF THAT INFORMATION WAS PREVIOUSLY REQUESTED).

DELIVERY, HANDLING, & STORAGE

NOTIFICATION
CONTRACTOR MUST NOTIFY CONSULTANT 48 HOURS OR MORE IN ADVANCE OF DELIVERIES SO THAT CONSULTANT MAY ARRANGE FOR INSPECTION.

PLANT MATERIALS
1. TRANSPORTATION - DURING SHIPPING, PLANTS SHALL BE PACKED TO PROVIDE PROTECTION AGAINST CLIMATE EXTREMES, BREAKAGE AND DRYING. PROPER VENTILATION AND PREVENTION OF DAMAGE TO BARK, BRANCHES, AND ROOT SYSTEMS MUST BE ENSURED.
2. SCHEDULING AND STORAGE - PLANTS SHALL BE DELIVERED AS CLOSE TO PLANTING AS POSSIBLE. PLANTS IN STORAGE MUST BE PROTECTED AGAINST ANY CONDITION THAT IS DETRIMENTAL TO THEIR CONTINUED HEALTH AND VIGOR.
3. HANDLING - PLANT MATERIALS SHALL NOT BE HANDLED BY THE TRUNK, LIMBS, OR FOLIAGE BUT ONLY BY THE CONTAINER, BALL, BOX, OR OTHER PROTECTIVE STRUCTURE, EXCEPT BAREROOT PLANTS SHALL BE KEPT IN BUNDLES UNTIL PLANTING AND THEN HANDLED CAREFULLY BY THE TRUNK OR STEM.
4. LABELS - PLANTS SHALL HAVE DURABLE, LEGIBLE LABELS STATING CORRECT SCIENTIFIC NAME AND SIZE. TEN PERCENT OF CONTAINER GROWN PLANTS IN INDIVIDUAL POTS SHALL BE LABELED. PLANTS SUPPLIED IN FLATS, RACKS, BOXES, BAGS, OR BUNDLES SHALL HAVE ONE LABEL PER GROUP.

WARRANTY

PLANT WARRANTY
PLANTS MUST BE GUARANTEED TO BE TRUE TO SCIENTIFIC NAME AND SPECIFIED SIZE, AND TO BE HEALTHY AND CAPABLE OF VIGOROUS GROWTH.

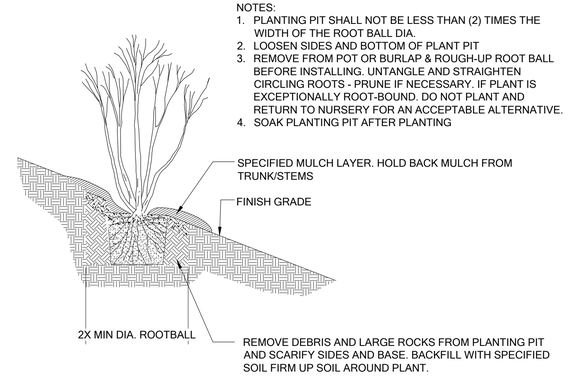
REPLACEMENT
1. PLANTS NOT FOUND MEETING ALL OF THE REQUIRED CONDITIONS AT THE CONSULTANT'S DISCRETION MUST BE REMOVED FROM SITE AND REPLACED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
2. PLANTS NOT SURVIVING AFTER ONE YEAR TO BE REPLACED AT THE CONTRACTOR'S EXPENSE.

PLANT MATERIAL

GENERAL
1. PLANTS SHALL BE NURSERY GROWN IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICES UNDER CLIMATIC CONDITIONS SIMILAR TO OR MORE SEVERE THAN THOSE OF THE PROJECT SITE.
2. PLANTS SHALL BE TRUE TO SPECIES AND VARIETY OR SUBSPECIES. NO CULTIVARS OR NAMED VARIETIES SHALL BE USED UNLESS SPECIFIED AS SUCH.

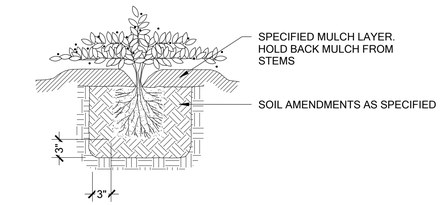
QUANTITIES
SEE PLANT LIST ON ACCOMPANYING PLANS AND PLANT SCHEDULES.

ROOT TREATMENT
1. CONTAINER GROWN PLANTS (INCLUDES PLUGS): PLANT ROOT BALLS MUST HOLD TOGETHER WHEN THE PLANT IS REMOVED FROM THE POT, EXCEPT THAT A SMALL AMOUNT OF LOOSE SOIL MAY BE ON THE TOP OF THE ROOTBALL.
2. PLANTS MUST NOT BE ROOT-BOUND; THERE MUST BE NO CIRCLING ROOTS PRESENT IN ANY PLANT INSPECTED.
3. ROOTBALLS THAT HAVE CRACKED OR BROKEN WHEN REMOVED FROM THE CONTAINER SHALL BE REJECTED.



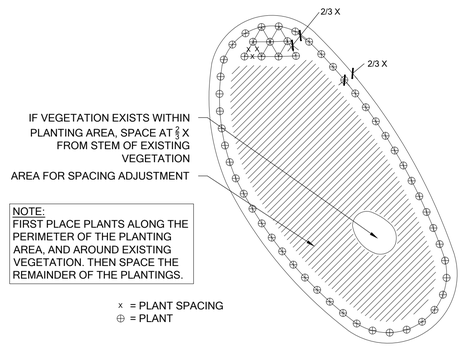
A TREE AND SHRUB PLANTING

Scale: NTS



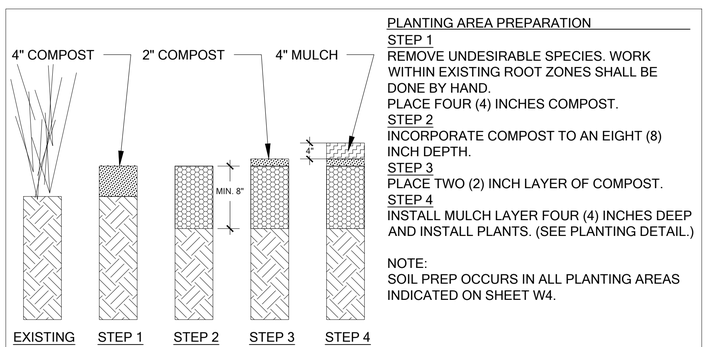
B GROUNDCOVER PLANTING

Scale: NTS



C PLANT SPACING

Scale: NTS



D SOIL PREP: AMEND EXISTING SOILS

Scale: NTS

Know what's **below.** **Call** before you dig.

PLANT INSTALLATION SPECIFICATIONS & DETAILS

THE WATERSHED COMPANY
750 Sixth Street South
Kirkland WA 98033
p 425.822.5242
www.watershedco.com
Science & Design

MITIGATION PLAN
SADIS PROPERTY DEVELOPMENT
PREPARED FOR: DAVID SADIS
PARCEL # 7768700120
9312 SE SHORELAND DR
BELLEVUE, WA 98004

SUBMITTALS & REVISIONS

NO.	DATE	DESCRIPTION	BY
	12-31-18	MITIGATION PLAN	LM
1	08-13-2019	MITIGATION PLAN REVISIONS	AF

SHEET SIZE:
ORIGINAL PLAN IS 22" x 34".
SCALE ACCORDINGLY.

PROJECT MANAGER: KJB
DESIGNED: LM
DRAFTED: LM,AF
CHECKED: KJB
JOB NUMBER:
180701
SHEET NUMBER:
W5 OF 6

FILENAME
PRINTED BY
DATE

MITIGATION & MONITORING NOTES

MITIGATION & MONITORING NOTES THE PROPOSED MITIGATION PLAN SEEKS TO ENHANCE PORTIONS OF THE ON-SITE SHORELINE BUFFER AS WELL AS UPLAND AREAS OF STEEP SLOPE AND STEEP SLOPE BUFFER AND SETBACK. AN AREA 1,106 SQUARE FEET IN SIZE IN THE SHORELINE AND 3,024 SQUARE FEET IN SIZE ON UPLAND STEEP SLOPES AND STEEP SLOPE BUFFERS/SETBACKS WILL BE RESTORED BY REMOVING INVASIVE VEGETATION AND PLANTING A VARIETY OF NATIVE TREES, SHRUBS, AND GROUNDCOVER IN SUITABLE LOCATIONS. SPECIES INCLUDE DOUGLAS-FIR, WESTERN REDCEDAR, CASCARA, SCOULER'S WILLOW, OSOBERRY, TWINBERRY, RED-FLOWERING CURRANT, SNOWBERRY, TALL OREGON GRAPE, SWORD FERN, BEACH STRAWBERRY, AND SALAL.

MAINTENANCE AND MONITORING PLAN

THE SITE SHALL BE MAINTAINED AND MONITORED FOR FIVE YEARS FOLLOWING SUCCESSFUL INSTALLATION. COMPONENTS OF THE 5-YEAR MAINTENANCE AND MONITORING PLAN ARE DETAILED BELOW.

GOALS

1. ESTABLISH DENSE NATIVE VEGETATION THAT IS APPROPRIATE TO THE ECO-REGION AND SITE.
2. LIMIT INVASIVE AND/OR NOXIOUS WEED COVER ON-SITE.
3. INCREASE OVERHANGING NATIVE VEGETATION ON LAKE WASHINGTON.
4. INCREASE HABITAT COVER AND REFUGE FOR URBAN WILDLIFE SPECIES. PROVIDE PERCHING, NESTING AND FORAGING HABITAT FOR NATIVE BIRDS.

PERFORMANCE STANDARDS

THE STANDARDS LISTED BELOW WILL BE USED TO JUDGE THE SUCCESS OF THE INSTALLATION OVER TIME. IF PERFORMANCE STANDARDS ARE MET AT THE END OF YEAR 5, THE SITE WILL THEN BE DEEMED SUCCESSFUL AND THE PERFORMANCE SECURITY BOND WILL BE ELIGIBLE FOR RELEASE BY THE CITY OF BELLEVUE.

1. SURVIVAL: ACHIEVE 100% SURVIVAL OF INSTALLED PLANTS BY THE END OF YEAR 1. THIS STANDARD CAN BE MET THROUGH PLANT ESTABLISHMENT OR THROUGH REPLANTING AS NECESSARY TO ACHIEVE THE REQUIRED NUMBERS.
2. NATIVE PLANT COVER:
   A. ACHIEVE 40% UNDERSTORY COVER OF NATIVE SAPLING TREES, SHRUBS AND GROUNDCOVER BY YEAR 2. RETAINED VEGETATION AND NATIVE VOLUNTEER SPECIES MAY COUNT TOWARDS THIS COVER STANDARD.
   B. ACHIEVE 60% UNDERSTORY COVER OF NATIVE SAPLING TREES, SHRUBS AND GROUNDCOVER BY YEAR 3. RETAINED VEGETATION AND NATIVE VOLUNTEER SPECIES MAY COUNT TOWARDS THIS COVER STANDARD.
   C. ACHIEVE 80% UNDERSTORY COVER OF NATIVE SAPLING TREES, SHRUBS AND GROUNDCOVER BY YEAR 5. RETAINED VEGETATION AND NATIVE VOLUNTEER SPECIES MAY COUNT TOWARDS THIS COVER STANDARD.
3. SPECIES DIVERSITY: ESTABLISH AT LEAST THREE NATIVE TREE AND FOUR NATIVE SHRUB SPECIES BY YEAR 3 AND MAINTAIN THIS DIVERSITY THROUGH YEAR 5. NATIVE VOLUNTEER SPECIES MAY COUNT TOWARDS THIS STANDARD.
4. INVASIVE COVER: AERIAL COVER FOR ALL NON-NATIVE, INVASIVE AND NOXIOUS WEEDS WILL NOT EXCEED 10% AT ANY YEAR DURING THE MONITORING PERIOD. INVASIVE PLANTS INCLUDE BUT ARE NOT LIMITED TO HIMALAYAN BLACKBERRY (RUBUS ARMENIACUS), CUT LEAF BLACKBERRY (RUBUS LACINIATUS, KNOTWEEDS (POLYGONUM CUSPIDATUM AND OTHERS), REED CANARYGRASS (PHALARIS ARUNDINACEA), CHERRY (HEDGE) LAUREL (PRUNUS LAUROCERASUS), ENGLISH HOLLY (ILEX AQUIFOLIUM), AND IVY SPECIES (HEDERA SPP.).

MONITORING METHODS

THIS MONITORING PROGRAM IS DESIGNED TO TRACK THE SUCCESS OF THE MITIGATION SITE OVER TIME AND TO MEASURE THE DEGREE TO WHICH THE SITE IS MEETING THE PERFORMANCE STANDARDS OUTLINED IN THE PRECEDING SECTION.

AN AS-BUILT PLAN WILL BE PREPARED BY THE RESTORATION PROFESSIONAL PRIOR TO THE BEGINNING OF THE MONITORING PERIOD. THE AS-BUILT PLAN WILL BE A MARK-UP OF THE PLANTING PLANS INCLUDED IN THIS PLAN SET. THE AS-BUILT PLAN WILL DOCUMENT ANY DEPARTURES IN PLANT PLACEMENT OR OTHER COMPONENTS FROM THE PROPOSED PLAN.

MONITORING WILL TAKE PLACE ONCE ANNUALLY IN THE FALL FOR FIVE YEARS. YEAR-1 MONITORING WILL COMMENCE IN THE FIRST FALL SUBSEQUENT TO INSTALLATION. THE FORMAL MONITORING VISIT SHALL RECORD AND REPORT THE FOLLOWING IN AN ANNUAL REPORT SUBMITTED TO THE CITY OF BELLEVUE:

1. VISUAL ASSESSMENT OF THE OVERALL SITE.
2. YEAR-1 COUNTS OF LIVE AND DEAD PLANTS BY SPECIES. YEAR-2 THROUGH YEAR-5 COUNTS OF ESTABLISHED NATIVE TREES AND SHRUBS BY SPECIES, TO THE EXTENT FEASIBLE.
3. COUNTS OF DEAD PLANTS WHERE MORTALITY IS SIGNIFICANT IN ANY MONITORING YEAR.
4. ESTIMATE OF NATIVE COVER IN THE MITIGATION AREA.
5. ESTIMATE OF NON-NATIVE, INVASIVE WEED COVER IN THE MITIGATION AREA.
6. TABULATION OF ESTABLISHED NATIVE SPECIES, INCLUDING BOTH PLANTED AND VOLUNTEER SPECIES.
7. PHOTOGRAPHIC DOCUMENTATION FROM AT LEAST THREE FIXED REFERENCE POINTS.
8. ANY INTRUSIONS INTO OR CLEARING OF THE PLANTING AREAS, VANDALISM, OR OTHER ACTIONS THAT IMPAIR THE INTENDED FUNCTIONS OF THE MITIGATION AREA.
9. RECOMMENDATIONS FOR MAINTENANCE OR REPAIR OF ANY PORTION OF THE MITIGATION AREA.

MAINTENANCE

THE SITE WILL BE MAINTAINED IN ACCORDANCE WITH THE FOLLOWING INSTRUCTIONS FOR AT LEAST FIVE YEARS FOLLOWING COMPLETION OF CONSTRUCTION:

1. FOLLOW THE RECOMMENDATIONS NOTED IN THE PREVIOUS MONITORING SITE VISIT.
2. GENERAL WEEDING FOR ALL PLANTED AREAS:
   A. AT LEAST TWICE YEARLY, REMOVE ALL COMPETING WEEDS AND WEED ROOTS FROM BENEATH EACH INSTALLED PLANT AND ANY DESIRABLE VOLUNTEER VEGETATION TO A DISTANCE OF 18 INCHES FROM THE MAIN PLANT STEM. WEEDING SHOULD OCCUR AT LEAST TWICE DURING THE SPRING AND SUMMER. FREQUENT WEEDING WILL RESULT IN LOWER MORTALITY, LOWER PLANT REPLACEMENT COSTS, AND INCREASED LIKELIHOOD THAT THE PLAN MEETS PERFORMANCE STANDARDS BY YEAR 5.
   B. MORE FREQUENT WEEDING MAY BE NECESSARY DEPENDING ON WEED CONDITIONS THAT DEVELOP AFTER PLAN INSTALLATION.
   C. DO NOT WEED THE AREA NEAR THE PLANT BASES WITH STRING TRIMMER (WEED WHACKER/WEED EATER). NATIVE PLANTS ARE EASILY DAMAGED OR KILLED, AND WEEDS EASILY RECOVER AFTER TRIMMING.
   D. SELECTIVE APPLICATIONS OF HERBICIDE MAY BE NEEDED TO CONTROL INVASIVE WEEDS, ESPECIALLY WHEN INTERMIXED WITH NATIVE SPECIES. HERBICIDE APPLICATION, WHEN NECESSARY, SHALL BE CONDUCTED ONLY BY A STATE-LICENSED APPLICATOR.
3. APPLY SLOW-RELEASE, GRANULAR FERTILIZER TO EACH INSTALLED PLANT ANNUALLY IN THE SPRING (BY JUNE 1) OF YEARS 2 THROUGH 5.
4. REPLACE MULCH AS NECESSARY TO MAINTAIN A 4-INCH-THICK LAYER, RETAIN SOIL MOISTURE, AND LIMIT WEEDS.
5. REPLACE EACH PLANT FOUND DEAD IN THE SUMMER MONITORING VISITS DURING THE UPCOMING DORMANT SEASON (OCTOBER 15 TO MARCH 1), FOR BEST SURVIVAL.
6. THE PROPERTY OWNER WILL ENSURE THAT WATER IS PROVIDED FOR THE ENTIRE PLANTED AREA WITH A MINIMUM OF 1 INCH OF WATER PER WEEK FROM JUNE 1 THROUGH SEPTEMBER 30 FOR THE FIRST TWO YEARS FOLLOWING INSTALLATION, THROUGH HAND-WATERING OR THE OPERATION OF A TEMPORARY IRRIGATION SYSTEM. LESS WATER IS NEEDED DURING MARCH, APRIL, MAY AND OCTOBER.

GENERAL WORK SEQUENCE

SITE PREPARATION

1. INSTALL SILT FENCE AND BIODEGRADABLE WATTLE PER PLANS.
2. MANUALLY CLEAR INVASIVE AND ORNAMENTAL VEGETATION FROM MITIGATION AREA DURING SPRING AND/OR SUMMER MONTHS (I.E., AVOID CREATING EXPOSED SOIL CONDITIONS DURING THE WINTER STORM SEASON).
   A. REMOVE INVASIVE SPECIES (I.E., HIMALAYAN BLACKBERRY, ENGLISH IVY), IN ACCORDANCE WITH KING COUNTY NOXIOUS WEED BEST MANAGEMENT PRACTICES. FOR MORE INFORMATION: HTTPS://WWW.KINGCOUNTY.GOV/SERVICES/ENVIRONMENT/ANIMALS-AND-PLANTS/NOXIOUS-WEEDS.ASPX.
   B. WITHIN APPROXIMATELY FIVE FEET OF PROPERTY BOUNDARIES, CUT UNDESIRABLE VEGETATION. LEAVE ROOTS INTACT TO MINIMIZE POTENTIAL IMPACTS TO SLOPES ON ADJACENT PROPERTIES.
   C. FLUSH-CUT ORNAMENTAL WOODY VEGETATION (E.G. ENGLISH HOLLY) THROUGHOUT MITIGATION AREA AND IMMEDIATELY TREAT STEM (DAUBING OR PAINTING) WITH APPROPRIATE HERBICIDE. PERSON APPLYING HERBICIDE SHALL BE STATE-LICENSED. DO NOT REMOVE SUBSURFACE ROOTS.
   D. AVOID AND MINIMIZE DISTURBANCE AND/OR COMPACTION TO ROOTS OF ESTABLISHED NATIVE TREES TO BE RETAINED WHEN REMOVING VEGETATION FROM WITHIN TREE DRIPLINES.
3. BLANKET-MULCH CLEARED AREAS OR RING MULCH AROUND INSTALLED AND EXISTING NATIVE PLANTS WITH WOOD MULCH, FOUR INCHES THICK.
   A. ENSURE MULCH DOES NOT TOUCH STEMS OF EXISTING (OR INSTALLED) VEGETATION. SEE PLANTING DETAIL ON SHEET W5.

MITIGATION PLANTING AND IRRIGATION

1. INSTALL MITIGATION PLANTS DURING THE DORMANT SEASON (OCTOBER 15 - MARCH 1).
   A. PREPARE A PLANTING PIT FOR EACH PLANT THROUGH BLANKET WOOD MULCH AND INSTALL PER THE PLANTING DETAILS.
2. INSTALL A TEMPORARY, ABOVE GROUND IRRIGATION SYSTEM TO PROVIDE FULL COVERAGE TO ALL INSTALLED PLANTS WITHIN THE RESTORATION AREA.

MATERIAL SPECIFICATIONS AND DEFINITIONS

1. FERTILIZER (FOR NEAR AQUATIC ENVIRONMENTS): SLOW-RELEASE, PHOSPHOROUS-FREE GRANULAR FERTILIZER. LABEL MUST INDICATE THAT PRODUCT IS SAFE FOR AQUATIC ENVIRONMENTS. FOLLOW MANUFACTURER'S INSTRUCTIONS FOR USE. KEEP FERTILIZER IN WEATHER-TIGHT CONTAINER WHILE ON-SITE. FERTILIZER IS ONLY TO BE APPLIED IN YEARS TWO AND THREE, NOT IN YEAR ONE.
2. IRRIGATION SYSTEM: AUTOMATED SYSTEM CAPABLE OF DELIVERING AT LEAST ONE INCH OF WATER PER WEEK FROM JUNE 1 THROUGH SEPTEMBER 30 FOR THE FIRST TWO YEARS FOLLOWING INSTALLATION.
3. RESTORATION PROFESSIONAL: WATERSHED COMPANY [(425) 822-5242] PERSONNEL, OR OTHER PERSONS QUALIFIED TO EVALUATE ENVIRONMENTAL RESTORATION PROJECTS.
4. WOODCHIP MULCH: "ARBORIST CHIPS" (CHIPPED WOODY MATERIAL) APPROXIMATELY ONE TO THREE INCHES IN MAXIMUM DIMENSION (NOT SAWDUST). THIS MATERIAL IS COMMONLY AVAILABLE IN LARGE QUANTITIES FROM ARBORISTS OR TREE-PRUNING COMPANIES. MULCH SHALL NOT CONTAIN APPRECIABLE QUANTITIES OF GARBAGE, PLASTIC, METAL, SOIL, AND DIMENSIONAL LUMBER OR CONSTRUCTION/DEMOLITION DEBRIS.
5. COMPOST: COMPOST SHALL MEET WSDOT STANDARDS SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION, 9-14.4(8) FOR FINE COMPOST.

CONTINGENCIES

IF THERE IS A SIGNIFICANT PROBLEM WITH THE RESTORATION AREAS MEETING PERFORMANCE STANDARDS, A CONTINGENCY PLAN WILL BE DEVELOPED AND IMPLEMENTED. CONTINGENCY PLANS CAN INCLUDE, BUT ARE NOT LIMITED TO: SOIL AMENDMENT, ADDITIONAL PLANT INSTALLATION, AND PLANT SUBSTITUTIONS OF TYPE, SIZE, QUANTITY, AND LOCATION.

Know what's **below.** **Call** before you dig.

MITIGATION & MONITORING NOTES

THE WATERSHED COMPANY
750 Sixth Street South
Kirkland WA 98033
p 425.822.5242
www.watershedco.com
Science & Design

MITIGATION PLAN
SADIS PROPERTY DEVELOPMENT
PREPARED FOR: DAVID SADIS
PARCEL # 7768700120
9312 SE SHORELAND DR
BELLEVUE, WA 98004

SUBMITTALS & REVISIONS

NO.	DATE	DESCRIPTION	BY
	12-31-18	MITIGATION PLAN	LM
1	08-13-2019	MITIGATION PLAN REVISIONS	AF

SHEET SIZE:
ORIGINAL PLAN IS 22" x 34".
SCALE ACCORDINGLY.

PROJECT MANAGER: KJB
DESIGNED: LM
DRAFTED: LM,AF
CHECKED: KJB
JOB NUMBER: 180701
SHEET NUMBER: W6 OF 6

FILENAME
PRINTED BY
DATE